FOUNDED IN 1856

RAILWAY AGE

MAY 29, 1948

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To minimize maintenance this new steam line is—

BYERS WROUGHT IRON

When the Southern Railway recently extended the high-pressure steam line in its Pegram Yards, the specifications reflected this progressive railroad's insistence on durability. Genuine wrought iron pipe was used. The illustration shows a portion of the new line, including an expansion bend. Diesel fuel oil lines, installed at the same time, were also wrought iron.

In selecting materials for a pipe line, it is not enough to consider whether the fluids carried are corrosive. Often external attack is a much greater hazard. Elevated pipe may be exposed to corrosive atmospheres, and buried pipe to corrosive soils.

Byers Wrought Iron pipe has proven its superior serviceability under these conditions, and many major railroads have utilized it to reduce repairs and maintenance. The reason for wrought iron's resistance is found in its unique composition and structure. Tiny threads of glass-like silicate slag, distributed through the body of high-purity iron, halt and "detour" corrosive attack. The fibers also help anchor the initial protective scale, which shields the underlying metal. For 100% protection, when you use wrought iron pipe specify *wrought iron* nipples; for welded systems use *wrought iron* welding fittings.

Our bulletin, "Wrought Iron for Piping Systems", discusses the corrosive conditions found in a number of building services. Ask for a copy.

A. M. Byers Co., Pittsburgh, Pa. Established 1864. Boston, New York, Philadelphia, Washington, Atlanta, Chicago, St. Louis, Houston, Salt Lake City, Seattle, San Francisco. Export Division: New York, N.Y.

BYERS
GENUINE WROUGHT IRON
TUBULAR AND HOT ROLLED PRODUCTS
ELECTRIC FURNACE QUALITY ALLOY AND STAINLESS STEEL PRODUCTS

CORROSION COSTS YOU MORE THAN WROUGHT IRON

RAILROADS REPRESENTING—

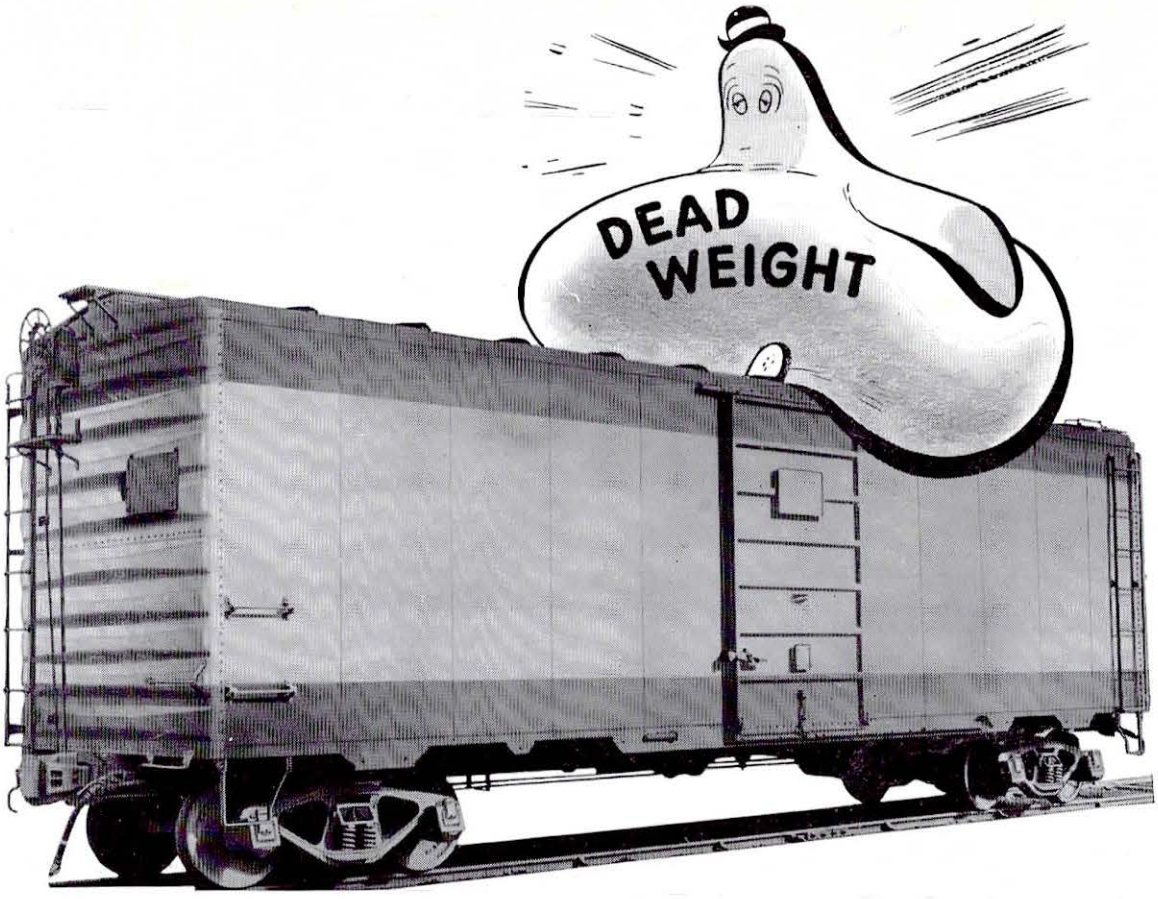
of the total railroad mileage in the U. S.

are now prepared to service freight cars

equipped with UNIT TRUCKS, including the

replacement of Unit Brake Beams in kind.

UNIT TRUCK CORPORATION NEW YORK



Are You Giving Him a Free Ride on Every Trip?

Inland Hi-Steel's High Strength-to-Weight Ratio

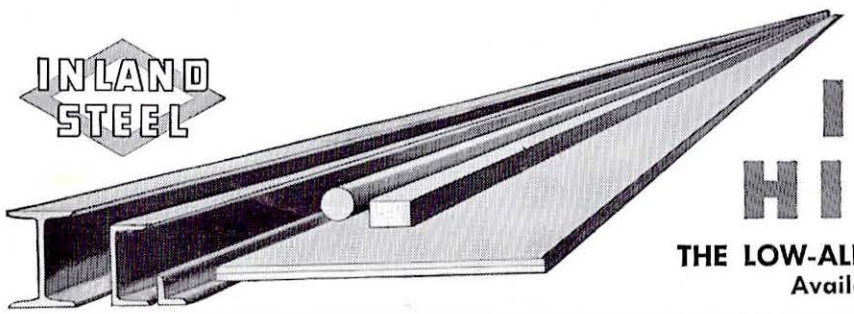
Reduces Dead Weight — Increases Payloads

If you're looking for a way to cut operating costs on rolling stock, look to Inland Hi-Steel. This remarkable low-alloy steel has nearly twice the yield strength of ordinary structural steel, and stands up 50% better under dynamic loads. Because lighter sections can be used without sacrificing strength, Hi-Steel decreases the weight of your equipment. Thus, payloads can be substantially increased or operation speeded up and braking loads reduced.

Hi-Steel has other advantages, too. It has about five times the corrosion resistance of ordinary steel, and is far more resistant to abrasion. It can be worked hot or cold, with little or no change from standard shop practice.

To make larger tonnages available to you, other companies are licensed to make Hi-Steel. Write for Bulletin No. 11. INLAND STEEL CO., 38 S. Dearborn St., Chicago, Ill. Sales Offices: Chicago, Davenport, Detroit, Indianapolis, Kansas City, Milwaukee, New York, St. Louis, and St. Paul.

Hi-Steel meets the requirements of SAE Specification 950



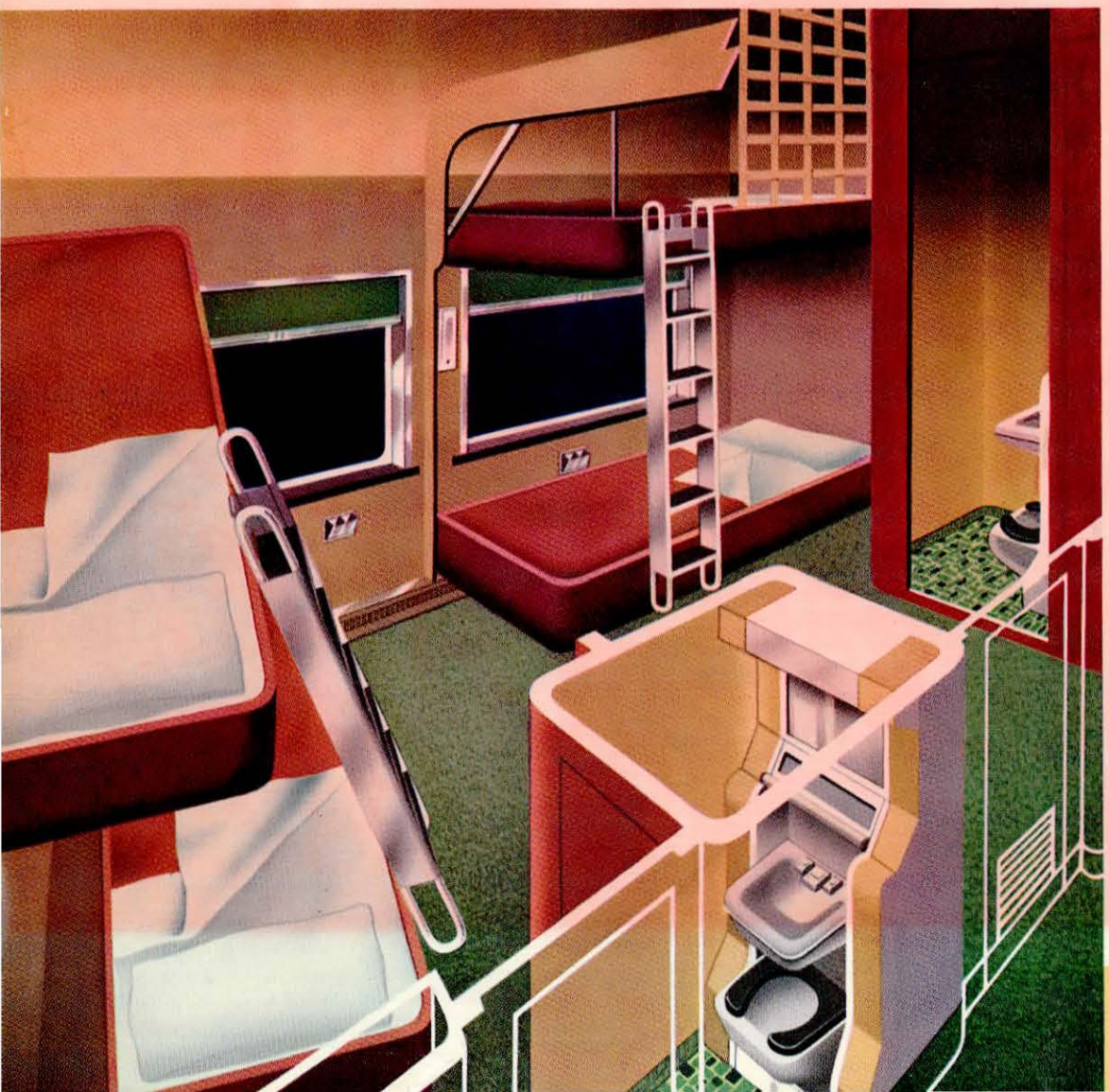
INLAND HI-STEEL

THE LOW-ALLOY, HI-STRENGTH STEEL
Available in Many Forms

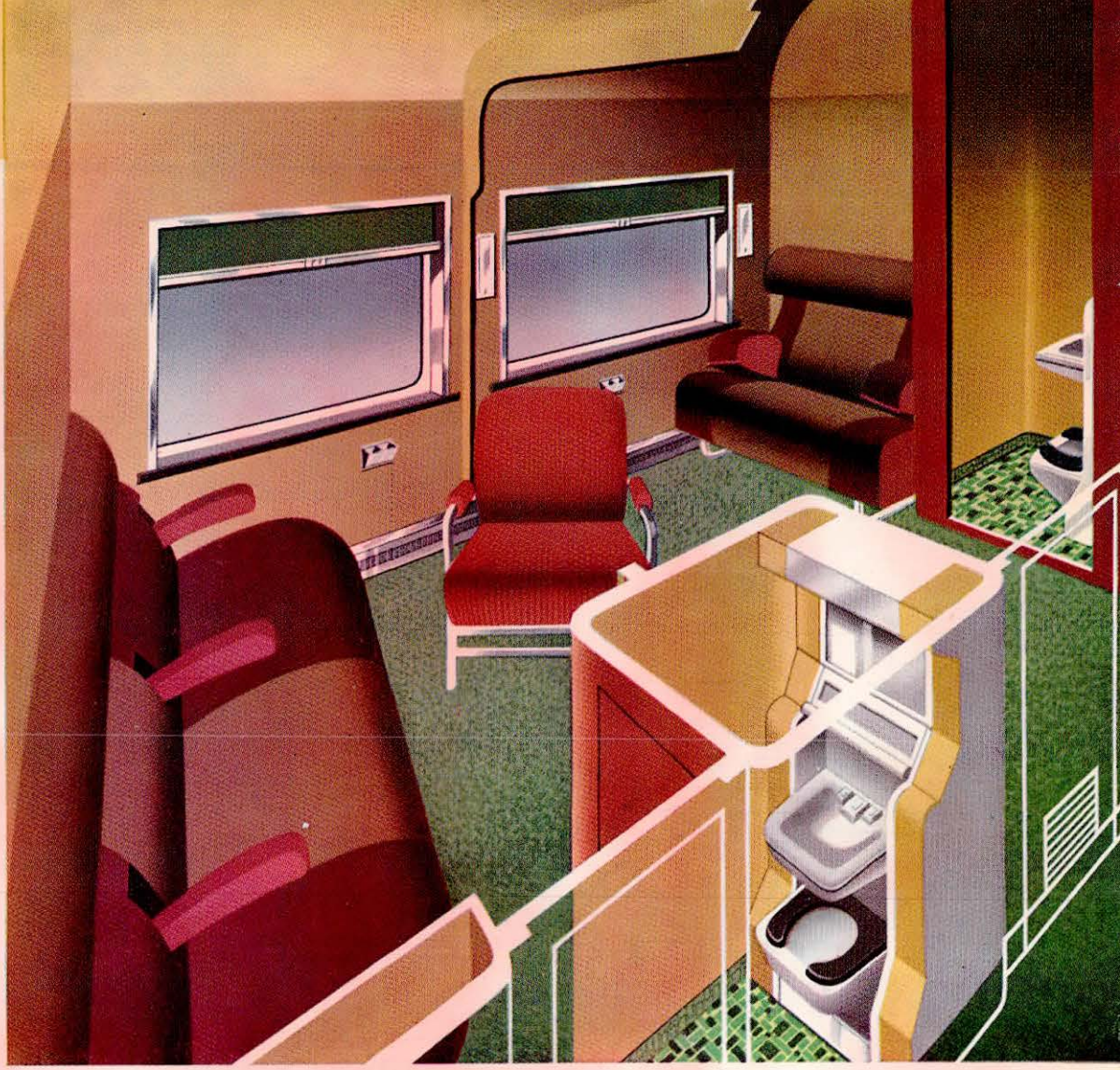
Published weekly by Simmons-Boardman Publishing Corporation, Orange, Conn. Executive Offices, 30 Church Street, New York 7, N. Y. Entered as second class matter at Orange, Conn., under the act of March 3, 1879. Subscription price $6.00 for one year. U. S. and Canada. Single copies, 50 cents each. Vol. 124, No. 22.

ALL DESIRED ROOM TYPES IN ONE SLEEPING CAR

Budd Design Establishes New Standard For Sleeping Car Construction



The Master Drawing Room provides beds for four, and can be converted into two connecting rooms by closing the folding partition.



Two double-bedrooms merged into a Master Drawing Room providing seats for six in daytime travel.

On April 30th of this year we delivered our first post-war sleeping car. Others are proceeding down our assembly lines for early delivery.

They contain six double-bedrooms and ten single rooms in what many railroads agree is the most versatile and practical sleeping car arrangement ever devised.

The double-bedrooms are sequenced in pairs, each pair having a connecting door in a folding partition. One room has beds lengthwise of the car, the other, crosswise.

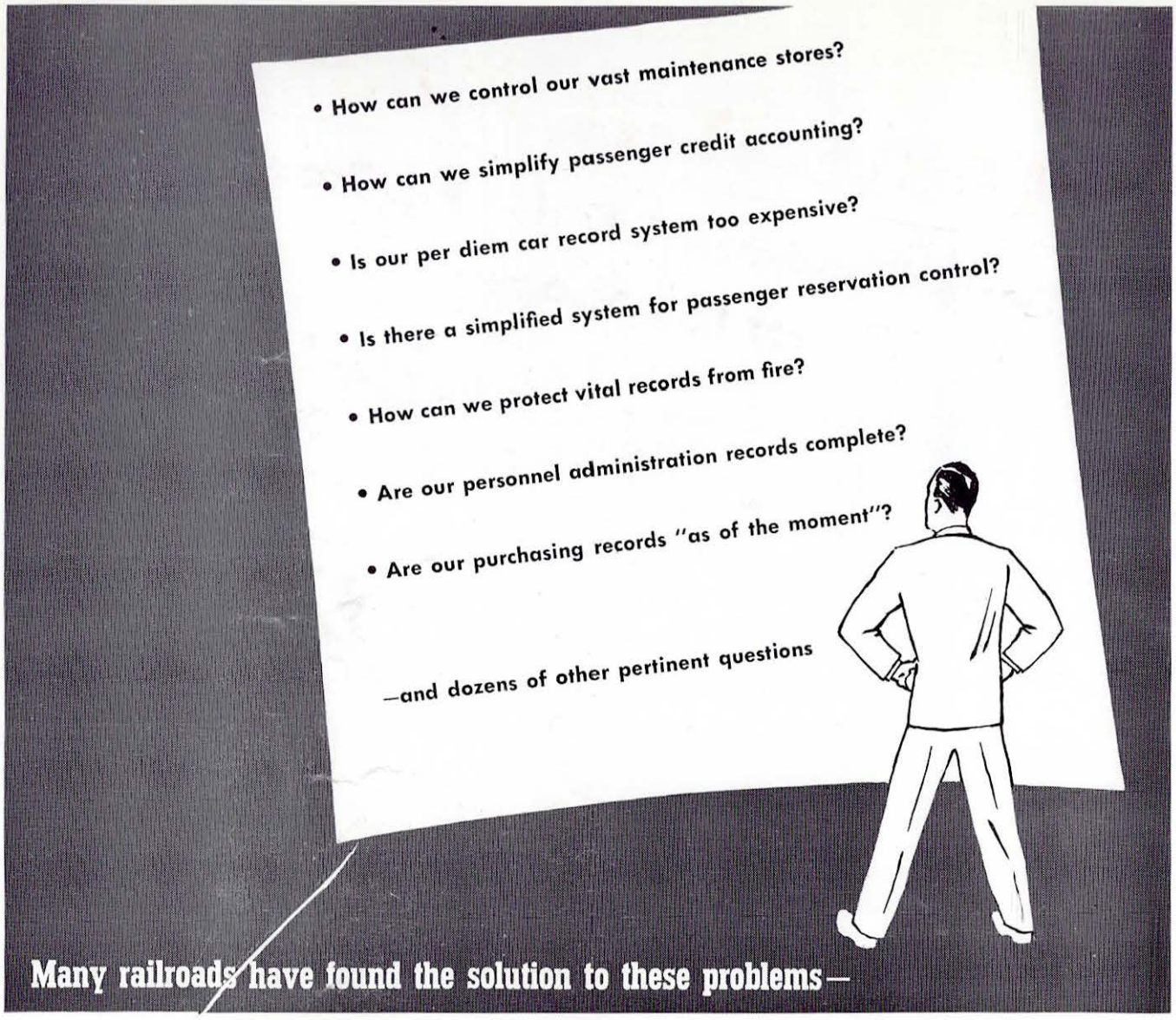
As a consequence, a car with no fixed drawing room can provide three spacious Master Drawing Rooms whenever they are called for, but if there is no call, no space is wasted.

This Budd design has at last made the double-bedroom a civilized accommodation for two people. Toilet facilities are located against the inner wall and are *fully enclosed.* Wall space formerly occupied by exposed toilets and lavatories is now freed to permit installation of a full-length, picture window.

All beds are pre-made. All lowers may be passenger operated. En route service requirements are at a minimum.

Representatives of your railroad are invited to see these cars as they are being built in our Red Lion plant in Philadelphia. The Budd Company, Philadelphia 32.

Budd


• How can we control our vast maintenance stores?
• How can we simplify passenger credit accounting?
• Is our per diem car record system too expensive?
• Is there a simplified system for passenger reservation control?
• How can we protect vital records from fire?
• Are our personnel administration records complete?
• Are our purchasing records "as of the moment"?
—and dozens of other pertinent questions
Many railroads have found the solution to these problems—

with Remington Rand Simplified Systems and Equipment

Profitable and efficient operation of railroads demands *know how* and *highly specialized* record keeping systems.

That's why thousands of roads have turned to Remington Rand for help in simplifying operating procedures and eliminating cost-heavy systems. They realize that we don't employ guesswork. No trial and error. Our systems are based on years of experience in developing step-saving procedures for railroads, large and small.

Only Remington Rand can give you a *choice* of systems plus equipment you'll need for full efficiency: A visible record for quick reference and supplying facts at a glance, *so necessary for stores control, per diem car records costs, personnel information* and *purchasing data;* vertical record equipment with special space-saving features to cut overhead costs; high speed filing and sorting equipment so useful in *passenger credit accounting procedure;* insulated housing units to protect all vital records from fire at point of use.

These are just a few of the many ways Remington Rand systems and equipment are helping railroads increase operating efficiency. It will pay you to investigate how our systems and procedures *can simplify and save in your operations.* Each record is patterned to meet your specific requirements, and installation, supervised by Remington Rand specialists, can be accomplished without interrupting your office routine during the change-over period.

For details, phone the Remington Rand office near you, or write Transportation Systems Department, 315 Fourth Avenue, New York 10, N. Y.

Keeping pace with railroad progress **Remington Rand** *the FIRST name in business systems*

NAILABLE STEEL FLOORING*

Keeps Gondolas Off the Rip Tracks— Out of the Shops

NAILABLE STEEL FLOORING helps keep gondolas off the Bad Order Report, saves you money in floor repair and replacement costs. Check these points that show *why* NAILABLE STEEL FLOORING cuts floor maintenance costs and keeps cars where they belong—on the line, bringing in revenue.

Greater Strength—Channel design gives NAILABLE STEEL FLOORING higher strength, more resistance to dishing than steel plate floors. After months of grinding impacts from magnets, hot pig iron and the clamshell shown, the NAILABLE STEEL FLOOR in a test car retained its over-all flatness and nailability, its suitability for blocked and skidded loads.

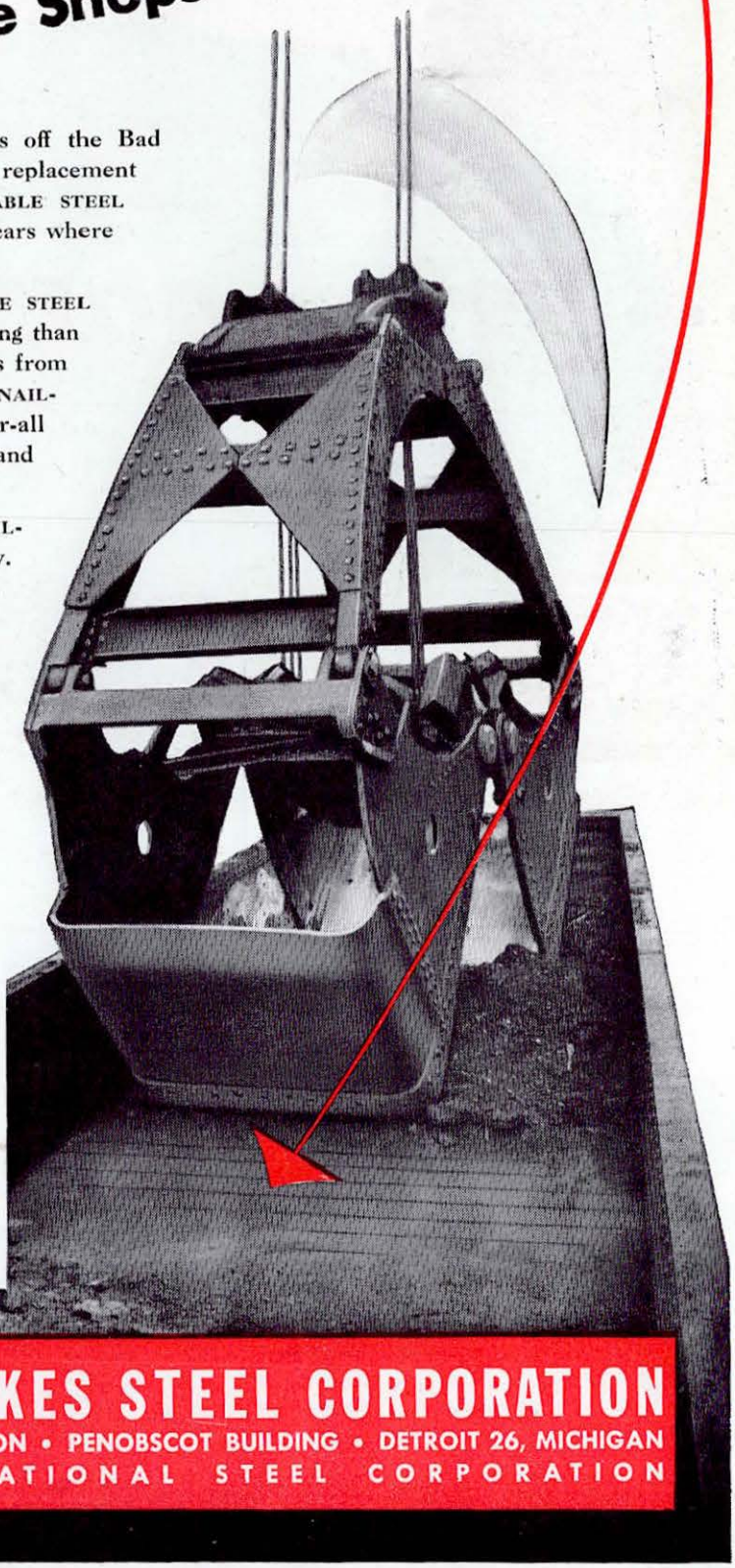
No Nail Damage—Nails can't rip or splinter NAILABLE STEEL FLOORING, can't damage it in *any* way. Held tighter than in wood, the proper size nails (20d or 30d in gondolas) are easily driven into the nailing grooves and can be readily removed.

High Rust Resistance—NAILABLE STEEL FLOORING is safer from rust because it's made from N-A-X HIGH-TENSILE steel which has three to five times the corrosion resistance of plain carbon steel and more than twice that of copper-bearing steel.

Combining nailability and strength, NAILABLE STEEL FLOORING does the job of both wood and conventional steel plate floors—and does each of them better. It saves money in operating as well as maintenance costs. When your next new car or rebuilding program comes up specify NAILABLE STEEL FLOORING.

NO TORN UP PLATES. This photograph shows gondola service at its roughest. Big clamshells like this ten-ton giant often tear rivet heads out of steel plate floors and rip up the cover plates. NAILABLE STEEL FLOORING *cannot* be torn up because it has no projecting rivet heads, no plate edges.

*PATENTS PENDING



NAILABLE STEEL FLOORING

A GREAT LAKES STEEL PRODUCT

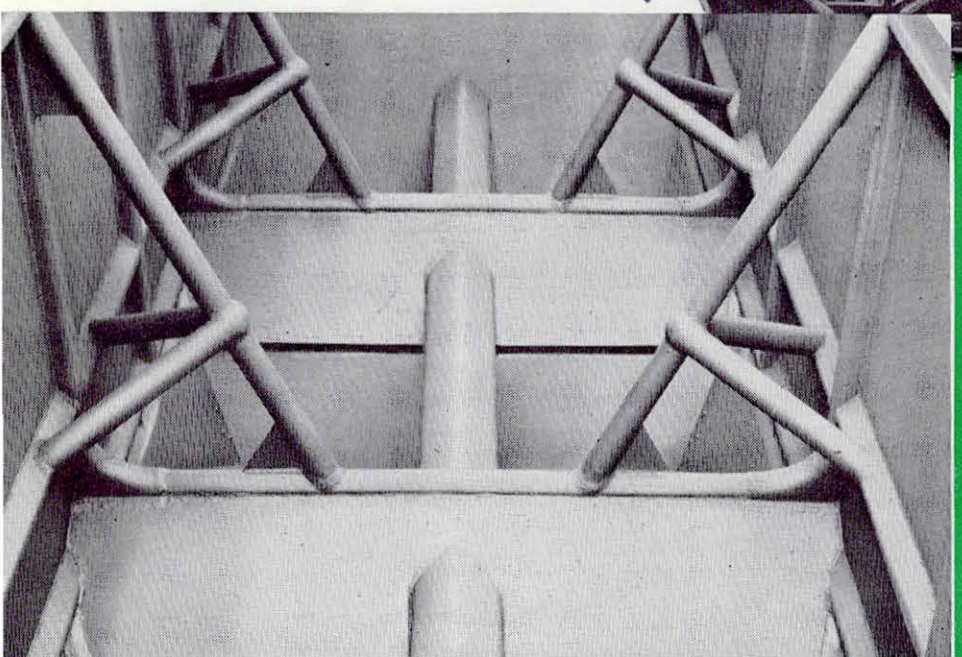
GREAT LAKES STEEL CORPORATION

STEEL FLOOR DIVISION • PENOBSCOT BUILDING • DETROIT 26, MICHIGAN

UNIT OF NATIONAL STEEL CORPORATION

Welded hopper cars

••• STILL GOING STRONG



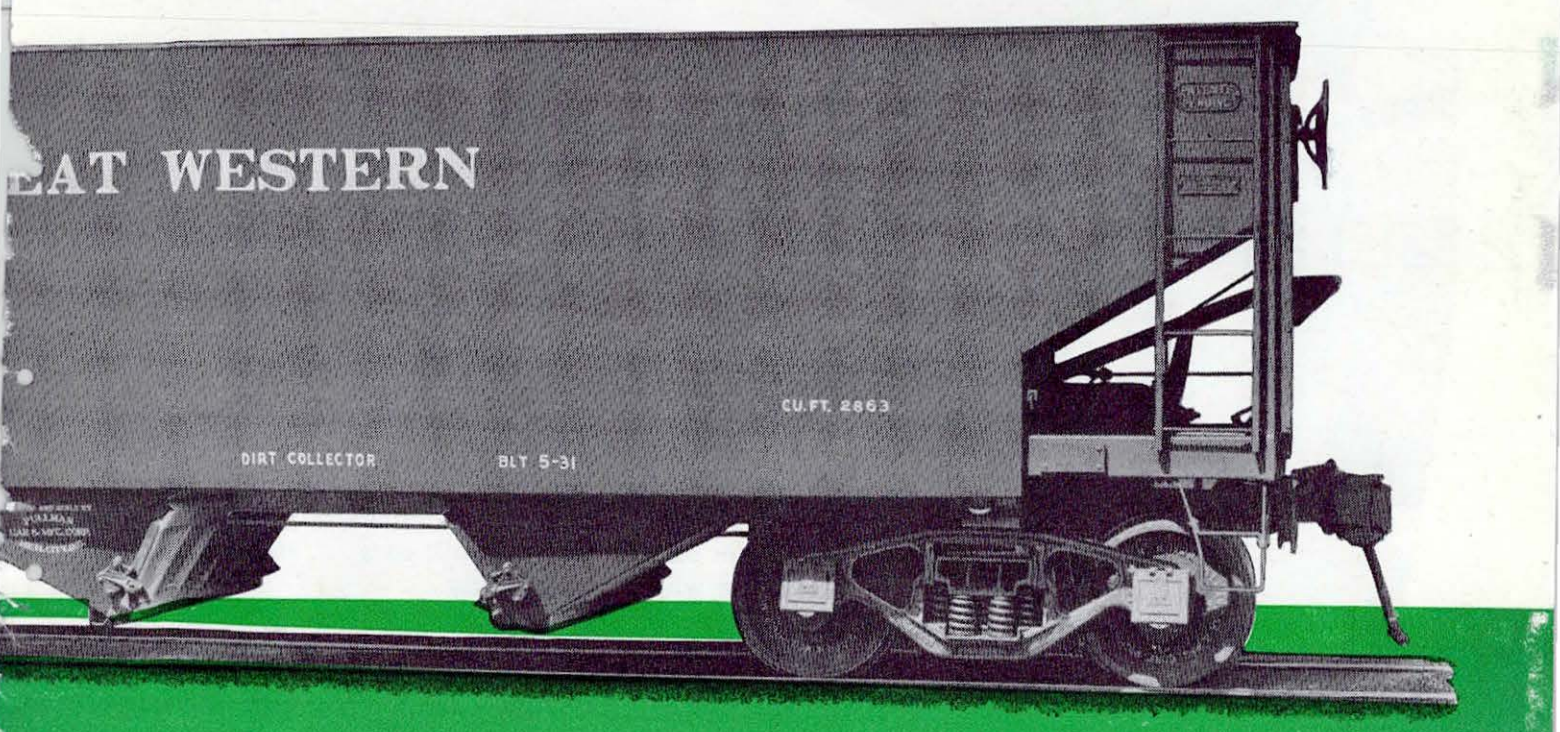
Pullman-Standard has pioneered the use of automatic welding equipment for the mass production of both freight and passenger cars.

built 17 years ago

Here is a pioneer adventure in welding and light weight. Seventeen years ago Pullman-Standard, with the collaboration of Oxweld Railway Service Co., designed and fabricated five welded light-weight hopper cars for the Chicago Great Western.

- The weight saving over similar riveted cars was from 7,000 to 10,500 pounds per car.
- They have been in continuous service since being built.
- They are in good operating condition today.
- They have required no heavy repairs, and their continuous service to date already exceeds by several years the period in which standard hopper cars normally require heavy repairs.

We feel that the service given by these cars points up the values built into Pullman-Standard products.



Pullman-Standard

CAR MANUFACTURING COMPANY

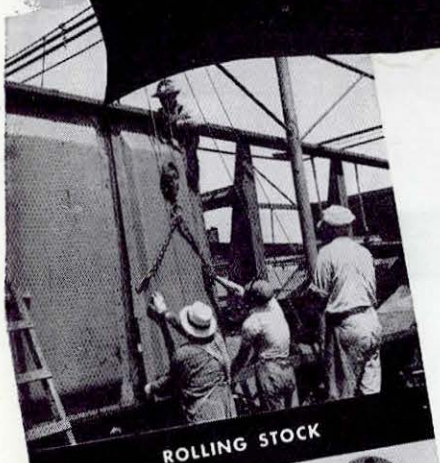
CHICAGO • NEW YORK • CLEVELAND • WASHINGTON, D. C. • PITTSBURGH • BIRMINGHAM • WORCESTER, MASS.

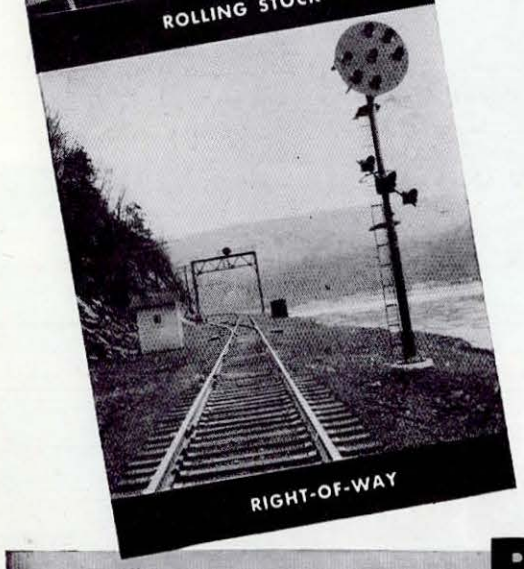
San Francisco Sales Representative, Mark Noble

make extra **NET PROFITS** *out of rust losses!*

RUST-OLEUM STOPS RUST

APPLY BY BRUSH, DIP OR SPRAY


ROLLING STOCK


RIGHT-OF-WAY

You Save on Maintenance Costs!

Keep cars rolling years longer . . . Provide essential protection to right-of-way equipment, bridges, buildings and other properties. Rust-Oleum coats metal . . . and dries firm—with a tough, *water-tight,* enduring film that prevents rust by moisture, fumes, acids, heat and many other destructive elements.

Rust-Oleum can be applied directly to any rusting surface—after easy, time-saving preparation. *It outlasts ordinary materials two to ten times,* depending on conditions. For lasting satisfaction and extra profits specify Rust-Oleum on new and re-built cars . . . and out on the right-of-way where rust is costly.

Write for full information TODAY. Ask for Catalog No. 145.

HERE'S HOW RUST-OLEUM SAVES TIME AND MONEY:

IT GOES ON FASTER
Rust-Oleum saves 25% of the time normally required for application . . . and covers up to 30% more area.

IT CUTS PREPARATION
No sandlasting, flame cleaning or chemical rust "dissolvers" are required. Merely wirebrush to remove scale, dirt, etc. and apply RUST-OLEUM.

IT PROTECTS LONGER
Rust-Oleum LASTS two to ten times longer than ordinary materials on most jobs. Every application gives maximum protection.

RUST-OLEUM CORPORATION
2415 OAKTON STREET EVANSTON, ILLINOIS

1898 *The first installation of the Diesel engine in America . . .*

1898 *The fifth year in the Fairbanks-Morse program of internal combustion engine manufacture.*

1948—The fiftieth anniversary of the Diesel engine in American service . . .

The history of the industry documents many achievements by Fairbanks, Morse & Co. in the design and production of Diesel engines . . .

There will be more, in the years ahead . . .

Fairbanks, Morse & Co., Chicago 5, Ill.

When it comes to Diesels . . .

FAIRBANKS-MORSE

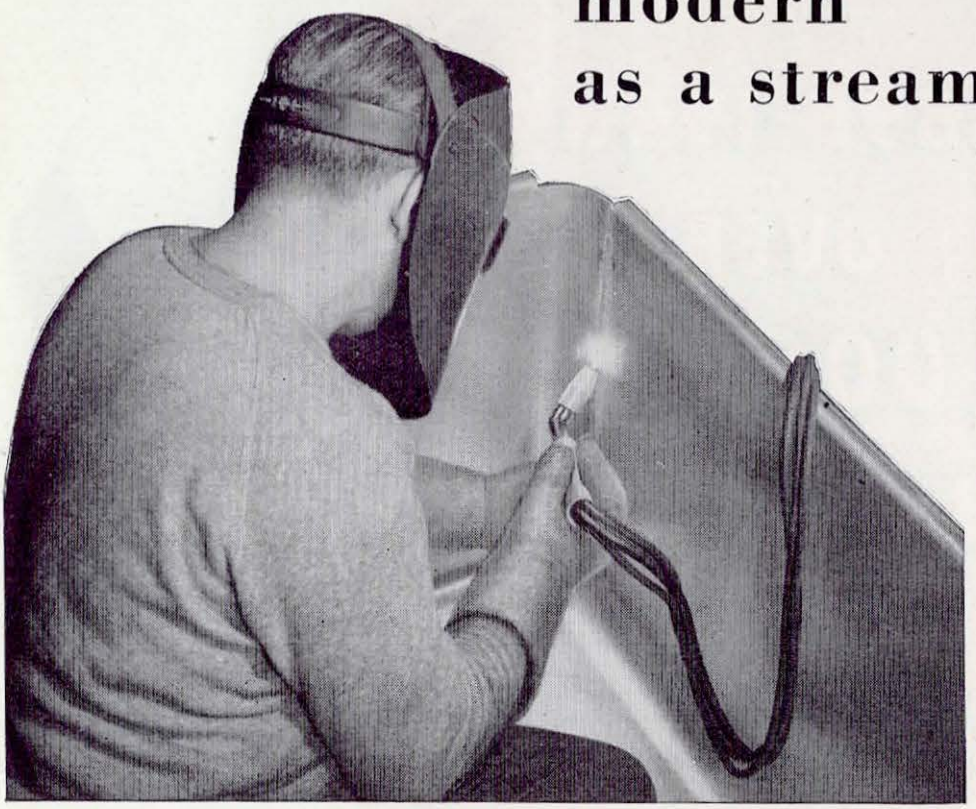
A name worth remembering

DIESEL LOCOMOTIVES • DIESEL ENGINES • STOKERS
SCALES • MOTORS • GENERATORS • PUMPS • FARM EQUIPMENT
MAGNETOS • RAILROAD MOTOR CARS and STANDPIPES

HELIARC Welding

Trade-Mark

modern as a streamline train



The HELIARC welding process is a new and different method of welding with the electric arc, in which the welding action is shielded by an inert gas—usually argon.

Joints welded with the HELIARC process have exceptionally high quality. They are clean because HELIARC welding eliminates flux. Joints are so smooth, even, and neat that usually no finishing treatment of any kind is required.

Butt, lap, tee, corner and angle joints are easily made on rolled, cast, extruded, or forged parts of stainless steel and practically all non-ferrous alloys of any commercially used thickness.

Purchasing Agents, Mechanical Superintendents, Car Foremen, Welding Supervisors should write for booklet F-6824. Please address The Oxweld Railroad Service Company, 230 N. Michigan Ave., Chicago 1, Ill.

A fast easy way to join

Stainless Steel
High-carbon Steel
Aluminum
Magnesium
Brass
Copper
Everdur
Cast Iron
Inconel
Silver

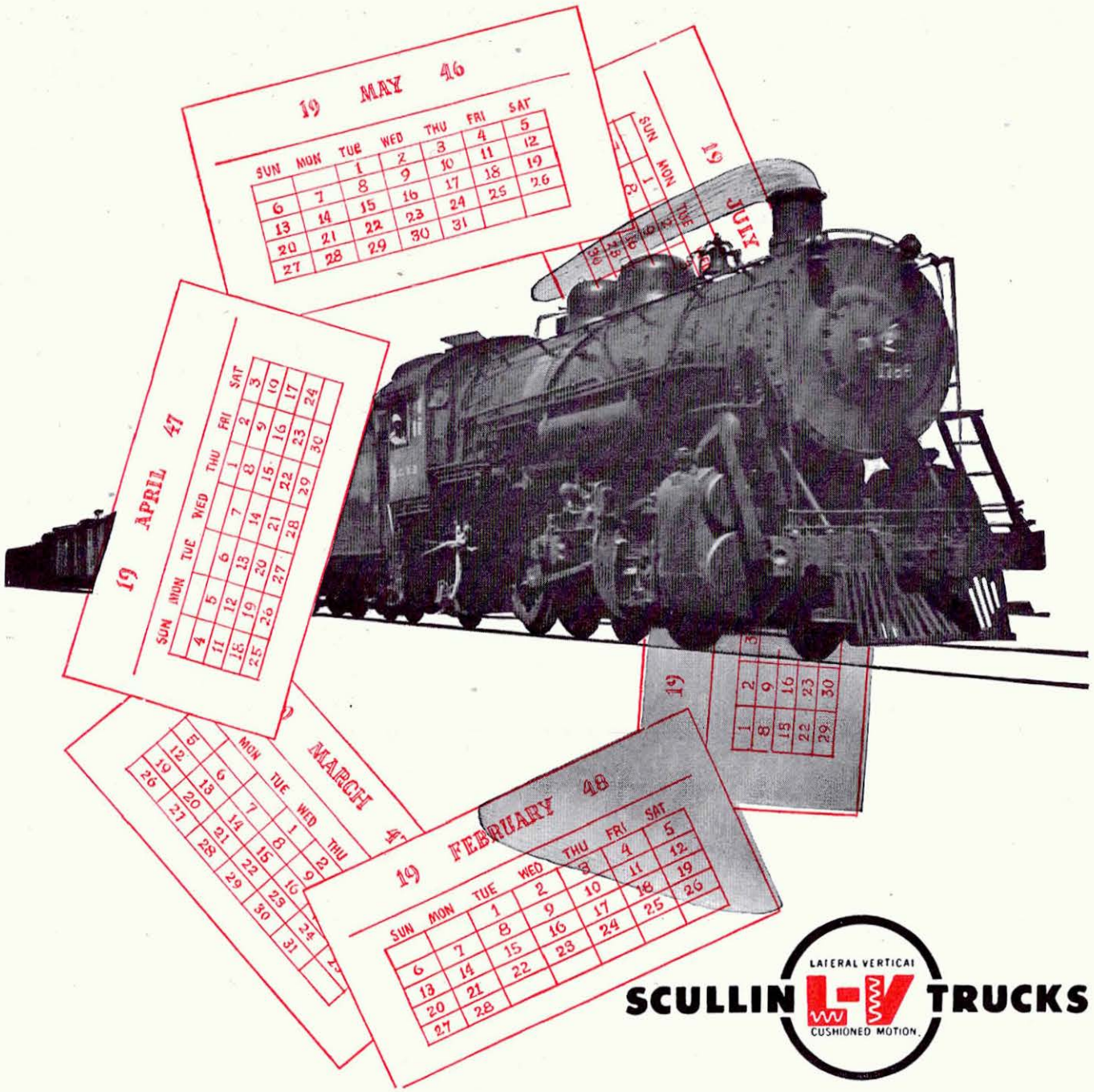
THE OXWELD RAILROAD SERVICE COMPANY
Unit of Union Carbide and Carbon Corporation

UCC

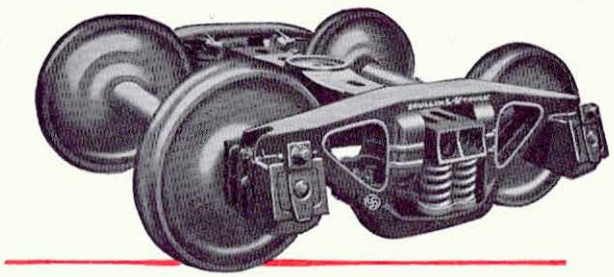
Carbide and Carbon Building Chicago and New York
In Canada:
Canadian Railroad Service Company, Limited, Toronto

SINCE 1912—THE COMPLETE OXY-ACETYLENE SERVICE FOR AMERICAN RAILROADS

The word "Heliarc" is a registered trade-mark.



SCULLIN L-V TRUCKS
LATERAL VERTICAL CUSHIONED MOTION



SMOOTHER RIDING
month after month

Both lateral and vertical motion are completely cushioned...destructive bounce and sidesway ended...by one simple device that needs no maintenance.

STEEL CASTING MANUFACTURERS · SINCE 1899 ·

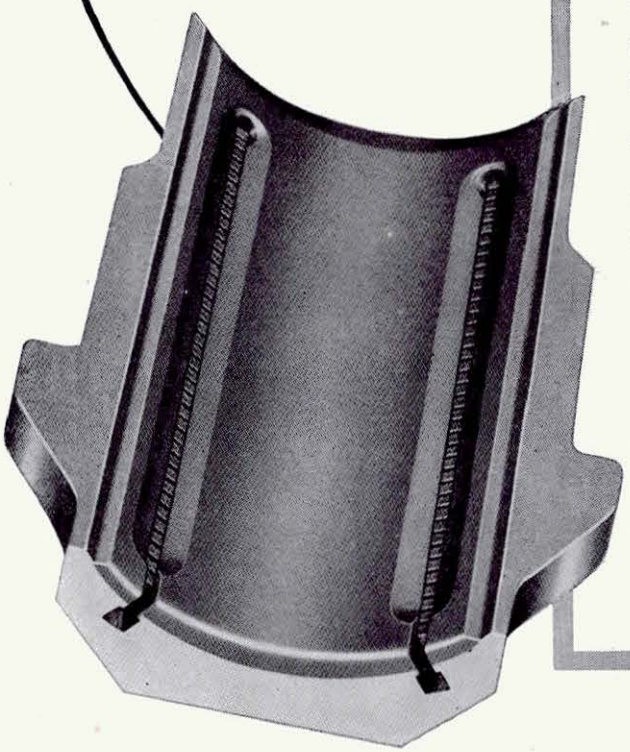
SCULLIN STEEL CO.
SAINT LOUIS 10, MISSOURI

NEW YORK • CHICAGO • CLEVELAND • BALTIMORE • RICHMOND, VA. • MEXICO CITY, D. F.

Modern MAGNUS BEARINGS *Improved*

"MAGSAFE" Satco-Lined JOURNAL BEARING

Stops Lint-Wipers and Waste-Grabs



The "Magsafe" Satco-Lined Car Journal Bearing complies with standard A.A.R. design and dimensions, but is equipped with "T" section brass "combs" to prevent lint-wipers and waste-grabs.

These combs are loosely held so that they rest on the journal and follow closely its every up-and-down movement.

Further advantages of the comb arrangement are uniform lubrication along the journal, and oil retention in the bearing, which is available the instant the car starts to move.

SATCO *Bearing Metal*

MODERN HEAVY DUTY BEARINGS

MAGNUS METAL CORPORATION
CHICAGO NEW YORK

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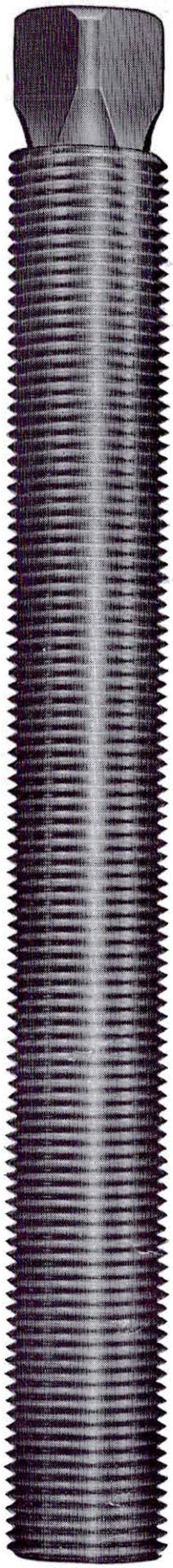


Facts about STAYBOLT STEEL *for engineers of motive power*

Strength: The tensile strength of Mayari Staybolt Steel is 50,000 to 60,000 psi—the minimum yield point is 33,000 psi. Staybolts made from this special alloy steel easily withstand the higher pressures of modern locomotive boilers.

Ductility: Highly ductile Mayari Staybolt Steel has a minimum elongation in 2 in. of 32 pct and a minimum reduction of area of 62 pct. It threads well and it heads readily by the usual methods.

Fatigue-resistance: Excellent resistance to fatigue is developed in Mayari Staybolt Steel. It well withstands the stress concentrations that ordinarily produce fatigue failure in staybolts.

Cost: In every essential property Mayari is equal or superior to staybolt materials heretofore in common use. Yet in spite of these advantages Mayari costs less. We suggest you compare prices—and figure the savings that Mayari Staybolt Steel would make in your yearly requirements.

Plan now to make a test installation of staybolts made from Mayari in one of your locomotives—then check the results. Several roads are currently running such tests, many others are using Mayari staybolts regularly in the majority of their steam motive equipment.

MAYARI (RHYMES WITH "FIERY") STAYBOLT STEELS

SAVE MAINTENANCE COSTS

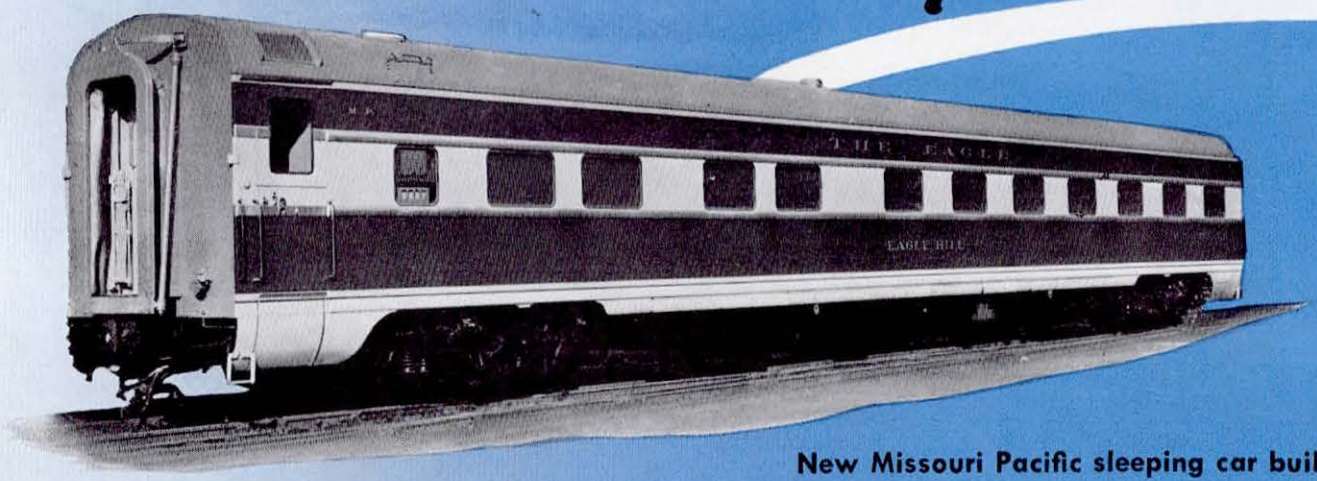
BETHLEHEM STEEL COMPANY, BETHLEHEM, PA.
On the Pacific Coast Bethlehem products are sold by
Bethlehem Pacific Coast Steel Corporation
Export Distributor: Bethlehem Steel Export Corporation

BETHLEHEM STEEL

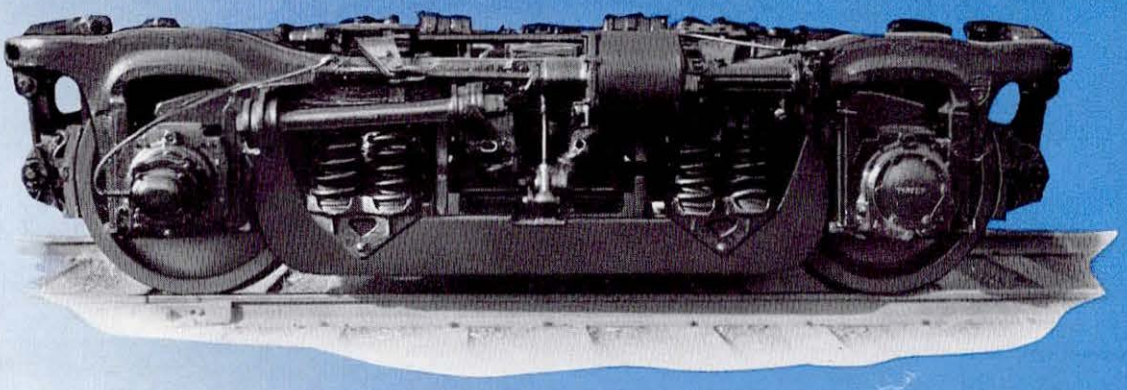
47 New Modern

FOR MISSOURI PACIFIC LINES

Feature



New Missouri Pacific sleeping car built by Pullman-Standard Car Mfg. Co.



Commonwealth four-wheel passenger car truck.

For strong, safe, smooth riding passenger cars, specify Commonwealth platform center sill castings and Commonwealth trucks.

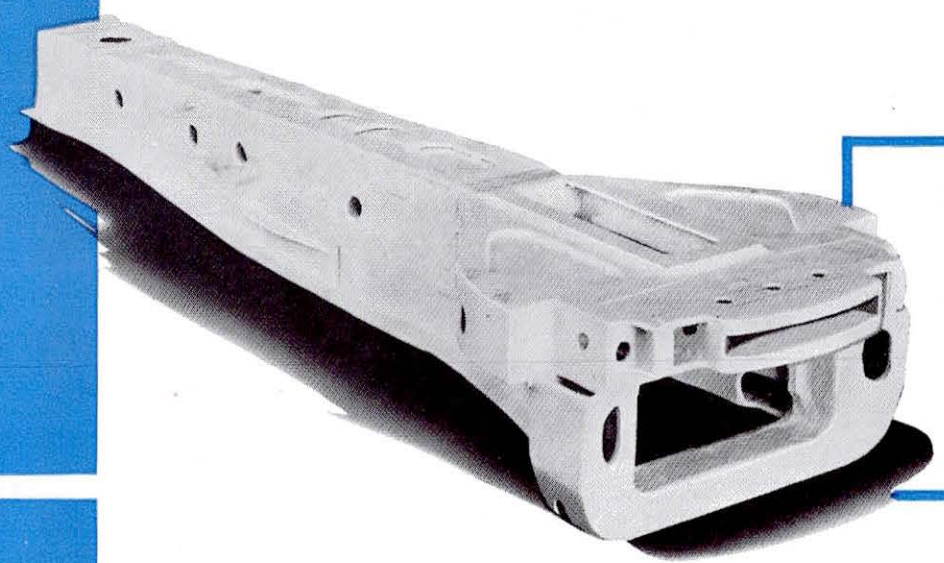
GENERAL

Sleeping Cars

AND TEXAS & PACIFIC RY.

COMMONWEALTH

Platform Center Sill Castings



Commonwealth one-piece alloy cast steel platform center sill.

COMMONWEALTH one-piece platform center sill castings on each end of the car are a vital part of the underframe construction of this fleet of new all-room sleeping cars. The heat treated alloy steel of which these castings are made provides *great ductility* and *toughness* to resist the impact of repeated end shocks.

Passengers are assured smooth comfortable riding on **COMMONWEALTH** four-wheel trucks of latest design. These trucks feature all-coil springing and are equipped with bolster roll stabilizers to provide positive mechanical control of car body roll. The **COMMONWEALTH** one-piece alloy steel truck frames and bolsters give maximum strength with light weight and assure long service life.

STEEL CASTINGS

EDDYSTONE, PA. GRANITE CITY, ILL.

BALTIMORE & OHIO
Triumph of Adventurous Planning

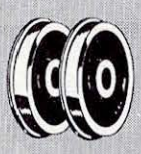
A rather wonderful fact is significant in the history of the Baltimore and Ohio, "America's pioneer railroad," which recently celebrated its one hundred and twenty-first birthday. Most early railroads were modestly conceived; rarely did their founders think much beyond the first short reaches of track, and subsequent extensions were usually planned by later visioners or resulted from consolidations. But the B & O founders set their sights far ahead of Ellicott's Mills, the first terminus thirteen miles from Baltimore. Indeed, the name chosen for the railroad revealed a goal grandly envisioned and adventurous in scope, which was to span the mountains and pierce the bear-trailed wilderness to the banks of the Ohio at Wheeling, almost 400 miles distant. And this, mind you, was planned with motive power of horseflesh, not iron, for the directors were thinking only of competing with the Erie Canal's horse-drawn barges! It is a wonder that these surprising men were not considered mad, yet they secured adequate financing without too much difficulty.

Twenty-five years after the infant road began operating, the Baltimore and Ohio reached its first objective, the Ohio, and one marvels not that it took so long, but that it was accomplished so soon. Certainly it was an achievement to make one proud of America and its early railroaders.

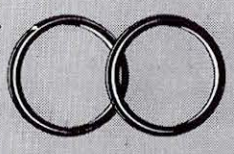
Edgewater

Serving America's Railroads

RING SPRING DRAFT GEARS



ROLLED STEEL WHEELS



LOCOMOTIVE TIRES

EDGEWATER STEEL COMPANY • PITTSBURGH, PA.

It's a robot-like "strong man" with brute power in its "legs" and in its "arms"—with the ability to push, pull, haul, load, lift, lower, or dig. It's a powerful "Caterpillar" Diesel D7 Tractor specially equipped with a maneuverable Hyster Hystaway.

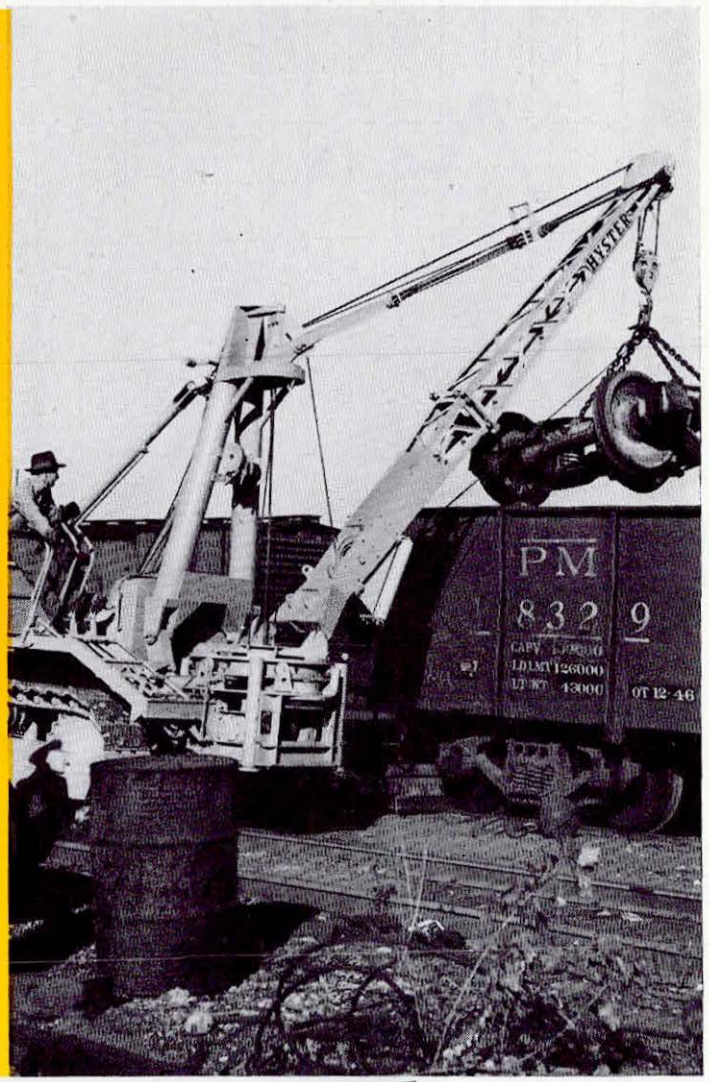
The Pere Marquette uses it for a wide variety of tasks around the yard and along the right of way. It can be equally useful to any busy railroad. It can load, unload or stock-pile materials—from engine sand to cinders and ballast. It can load, unload and lay rails and ties. It can put car trucks abo... rails for installation underneat... build culverts. It can use bucket, cra... tongs or sling. With a bulldozer on the front end, the same machine can do scores of earthmoving and cleanup jobs.

Here, indeed, is a mobile, versatile tool that can help earn dividends in many ways.

• • •

CATERPILLAR TRACTOR CO., PEORIA, ILLINOIS

Here's an off-track helper that can really "go to town"

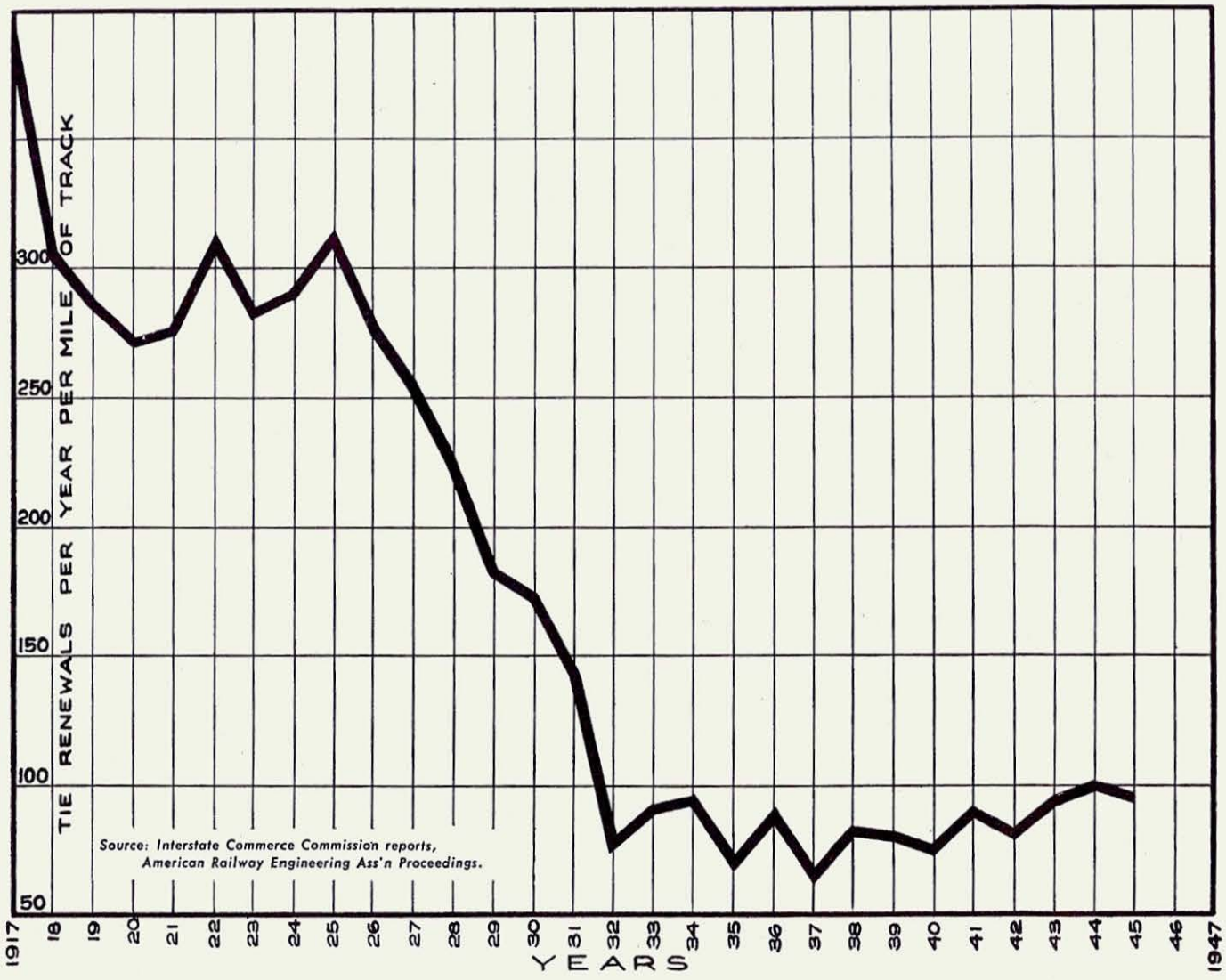


CATERPILLAR
REG. U. S. PAT. OFF.
DIESEL
ENGINES • TRACTORS
MOTOR GRADERS
EARTHMOVING EQUIPMENT

Outstanding Record

Renewal of Cross Ties Remarkably Low on

Chesapeake and Ohio Railway



In 1915, at the instigation of the American Creosoting Company, the Chesapeake and Ohio Railway was induced to embark upon the preservative treatment of its cross ties. At first only a part of the renewals were made with treated ties; soon, however, the great economy of Amcreco methods and organization became so clear that all renewals were so made.

The outstanding results, enormous economies, are evident from the above chart. The annual renewal of cross ties before the Amcreco organization began treating them was about 300 per track mile. As is seen from the chart, this was reduced to, and has been maintained at, less than 100.

Very greatly increased loads and traffic have occurred in these 33 years. These have been met by increased rail weight, tie plates, ballast and drainage, which have kept pace with the increased service, but the ties themselves have lasted because of Amcreco treatment.

This is an outstanding example of what has been done by American Railroads in improvement and economies and in forest conservation.

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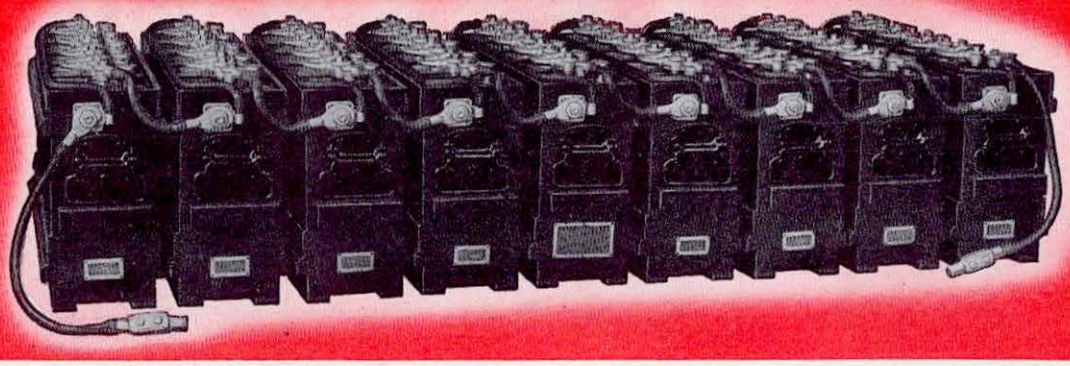
LIGHTWEIGHT Power-



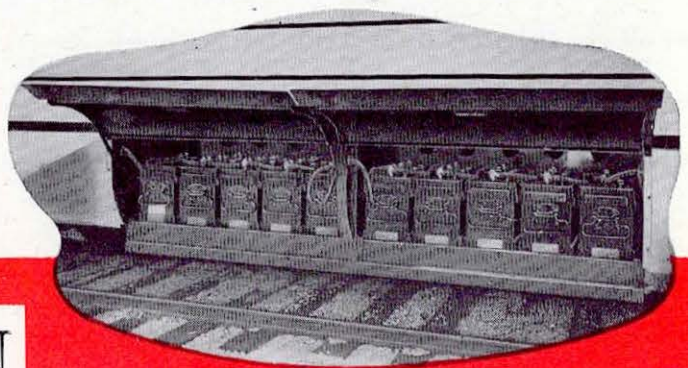
THAT'S ALWAYS APACE WITH PROGRESS

TODAY'S railroad passenger car designs are keynoted on comfort and convenience. The trend, therefore, is to provide greater electric power supply for improvements in air conditioning, air circulation, humidity control and illumination standards, as well as for increased use of electrical appliances.

In new axle-generator cars having electromechanical air conditioning systems with refrigerating capacities of 7 to 8 tons, for example, designers have shown a definite swing toward 64- and 110-volt systems with generators ranging from 20 kw upward and batteries of approximately 55 to 65 kwhr capacity.

The need for these higher capacities, and the increased importance of uninterrupted electric power during non-generating time on the road, serve to accentuate the desirable characteristics of EDISON Nickel-Iron-Alkaline Batteries—especially their *minimum weight* and *maximum dependability.*

From the time of their first application to railway passenger cars early in this century, these original lightweight batteries have always been apace with progress, repeatedly proving their inherent dependability to the railroad industry.



Typical batteries for 110-volt axle-generator cars. Top: half of a 90-cell A12H battery, 8-hour capacity 56.73 kwhr. Above: one of three battery boxes in each car of R F & P's latest streamliner, "The Old Dominion", showing section of an 88-cell A14H battery, 8-hour capacity 64.71 kwhr.

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EDISON STORAGE BATTERY DIVISION
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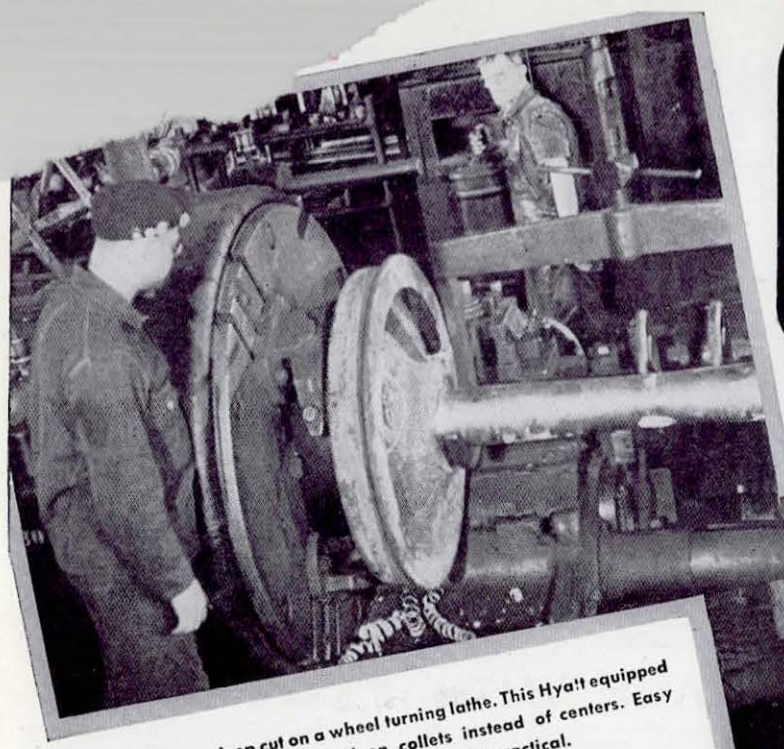
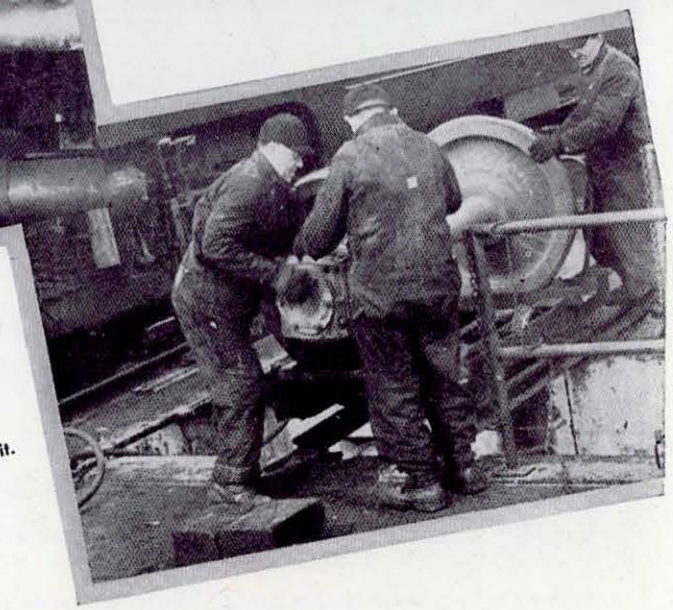
At the wheel Lathe or drop pit *it's easier with* HYATTS



Taking a deep cut on a wheel turning lathe. This Hyatt equipped axle set is being turned on collets instead of centers. Easy removability of Hyatt boxes makes this practical.



Hyatt roller bearing equipped axle at the drop pit.

Whether they are removing journal boxes for inspection or turning wheels on a wheel lathe any shop man will tell you "It's easier with Hyatts."

Hyatt journal boxes can be slipped on and off car axles easily and quickly without special tools. This feature alone accounts for many of the maintenance advantages that Hyatt journal boxes offer.

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To illustrate the simplicity of Hyatt journal box removal, let us send you one of our journal box visualizers. No obligation, of course. Hyatt Bearings Division, General Motors Corporation, Harrison, New Jersey.

HYATT ROLLER BEARING JOURNAL BOXES

Vol. 124, No. 22 May 29, 1948

RAILWAY AGE

With which are incorporated the Railway Review, the Railway Gazette, and the Railway-Age Gazette. Name Registered in U. S. Patent Office.

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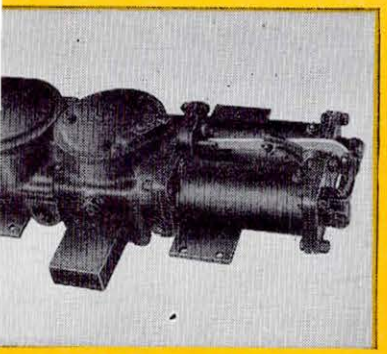

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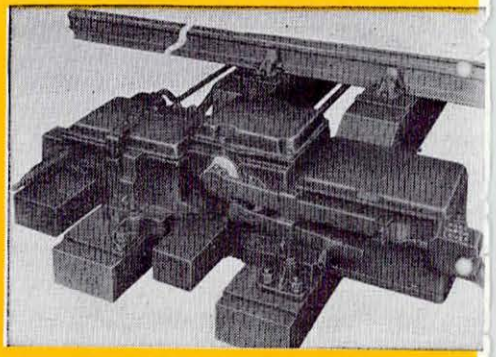

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WEEK AT A GLANCE

BRIDGE RENOVATION: Renewing the substructure of a long multiple-span girder bridge without changing the alinement or interfering with traffic—a ticklish job under any circumstances—recently was accomplished by the Louisville & Nashville through adoption of a special bridge pier design and construction technique. An illustrated article (page 38) describes the new piers and the method by which the existing spans were floated into position on them.

NON SEQUITUR: A characteristic and illuminating example of the quality of the leadership the brotherhoods are getting is the "resolution" adopted this week in Washington by the hierarchy of the "standard organizations," namely, the Railway Labor Executives Association. As reported in the article on page 45, this resolution amounted to an appeal to the "government" to exercise active control of the railroads, to take over their revenues, and "bargain" with the unions. These leaders haven't appeared to bother themselves in the past about logical inconsistencies, and it isn't to be expected that they will bother now, but most of the railroads' employees are intelligent men, and they must be asking themselves if this is a case for the application of the old copy-book maxim about whom the gods would destroy. For the resolution begging for government control "whereased" that this same government has "forced" the hold-out ops to cancel their strike; that this same government has "encouraged" railroad managements not to make further concessions; that it has assumed the role of a strike-breaker; and that the emergency board created by this same government has recommended terms unacceptable to the three chiefs on a limb. Because these things are so, the R.L.E.A. appeals for *more* government control!

GASS HEADS C.S.D.: Effective June 1 Arthur H. Gass assumes the chairmanship of the Car Service Division of the Association of American Railroads, succeeding Warren C. Kendall, who goes on leave of absence after 51 years of railroad service in which he established a record that has won for him many tributes from within and without the industry. A summary of Mr. Kendall's career, and of the organization changes that are now being made, appears in our news columns.

BASIC PREPAREDNESS: The immense job the railroads had to do to meet the demands for transportation in World War II is still remembered. Before it is forgotten its lesson should be applied to planning for another war, one of our editorials observes. The railroads were starved for critical materials during the last war. Should a similar policy dictate the allocation of these materials again? Skilled employees were drafted for military service in such numbers that the efficiency of the railroads was affected. Should a similar attitude toward trained personnel be allowed to guide the disposition of manpower in another war? These are questions that the military planners and legislators cannot escape answering. The nation's ability to fight will depend on its ability to transport, and means must be provided to develop that ability to a higher level than was reached with the sometimes dangerously unrealistic policies that prevailed in 1942-46.

HARDIER HEADLIGHTS: The New York Central's experience with sealed-beam lamps for locomotive headlights, beginning in the summer of 1946, indicates that they will give better performance than the older type lamp at probably no greater maintenance cost. A brief description of the mounting appears in an article in this issue, where it is pointed out that the higher first cost of the automobile-style lamps is offset partially by their longer service life, with which must be considered the added saving in upkeep operations and the elimination of reflectors.

PROGRESS IN SMOKE ABATEMENT: What the Chicago & North Western has done to hold down the smoke nuisance in its Chicago terminal territory is summed up in Mr. Matzke's article in this issue. Mechanical developments such as over-fire steam air jets play their part, and research and experience are making physical facilities for smoke abatement more available and more effective, but no factor in the North Western's technique has exceeded in importance the close and persistent attention of supervisors and management to the establishment and maintenance of favorable and improving conditions.

SUPPORTERS MUST BE LED: It is very necessary that the public should have a favorable feeling about the railroads. There has been a great deal of effort expended in building up such an attitude, and there is plenty of evidence that it exists. But a favorable public sentiment is not enough. There must be *action,* too, our leading editorial points out, action by the public and by those representatives of the public who shape the laws and administer them. The public does not want a railroad strike to occur. The public does not want railroad earnings to be so inadequate that they cannot continue to produce efficient transportation service. But the danger of a strike will not be removed, and the need for policies to assure better earnings will not be met, unless somebody supplies constructive leadership in converting that public sentiment into effective action. The railroads, and their friends in industry, cannot afford to fail to provide that aggressive and unflagging leadership.

ON THE HOME FRONT: "Ambassadors" of the railroads in their own communities, and "public relations representatives"—these were titles applied by speakers to the freight agents assembled in meeting in Buffalo last week, as our report in this issue notes. The discussions of the papers that were presented, and the recommendations and comprehensiveness of the committee reports, showed that the significance of good service at the freight station in building and holding the good will of the railroads' customers is appreciated and translated into action.

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RAILWAYS NEED NOT ONLY FRIENDS, BUT HELPFUL POLICIES

The recent very narrow escape by the railroads and the nation from a disastrous railroad strike forcibly illustrated that, as has been repeatedly emphasized in these columns, much more than a friendly public sentiment is needed to solve the problems of the railroads. It illustrated, as *Railway Age* has so often emphasized, that it is essential also to get *action* by the public and its representatives in favor of *specific needed policies.*

Public sentiment opposed the strike. Public sentiment was favorable to the railways in their controversy with the enginemen and switchmen, largely because the railways had offered to accept, and the unions had refused to accept, the recommendations of a fact-finding board appointed by the President. The Railway Labor Act was based on the assumption that after such fact-finding boards had held hearings and made recommendations, public sentiment would prevent strikes by virtually forcing the parties to disputes to accept the recommendations of the boards. But in this and other previous instances it did not do so. The strike would have occurred, in spite of public sentiment, as a strike actually occurred two years ago, if it had not been prevented by so-called government "seizure" of the railways under an almost forgotten law passed in 1916 to prevent railway strikes *in time of war* and by a court injunction forbidding a strike during the so-called "government operation" following this so-called "seizure."

Those who were familiar with what had been occurring under the Railway Labor Act for almost a decade were not surprised by its failure to prevent a strike. Its effectiveness as a means of preventing strikes was destroyed by President Roosevelt in 1941 when the railway labor unions rejected recommendations made by a fact-finding board and the President got them larger increases in pay than had been recommended by the board he had appointed. Everybody who knew the facts knew that ever since then the Railway Labor Act had been perfectly valueless as a means of preventing strikes and that in due course a serious railway strike would occur unless the law was strengthened or some other method of preventing strikes was adopted.

Fine Feeling—No Action

What was done to rectify this condition? Extensive activities to make public sentiment friendly to the railways have been carried on. These activities have been of various kinds. They have been carried on by the railroads themselves and by other interests that have been concerned about the welfare of the railways. But nobody who could exert

any considerable influence on public sentiment or on public officials advocated *any specific legislation or other action* calculated to prevent railway strikes. The Taft-Hartley Act contains (section 208) a provision directing the attorney general of the United States to seek injunctions to prevent strikes or lock-outs that may "affect an entire industry or substantial part thereof engaged in trade, commerce, transportation, transmission or communication . . . that will imperil the national health or safety." There was obviously more need to apply this provision to strikes on railways than in any other industry, and yet no substantial effort was put forth to have the Taft-Hartley Act made applicable to labor disputes on railways, and there was included in it a provision expressly exempting railway labor disputes from it.

Public relations activities may be carried on (1) to create a public sentiment friendly to a company or an industry, (2) to promote or permit adoption of specific policies that will be helpful to it or (3) for both purposes. Sometimes it is contended that in the railroad industry the creation of a friendly public sentiment should be the sole objective of public relations activities and that the securing of specific favorable action by legislative or administrative bodies is a function of the law department or of other officials or committees especially designated for that purpose.

Costly Lack of Leadership

This paper abstains at this time from discussing who should do what. We do emphasize once more, as is almost daily emphasized by events, that a friendly public sentiment, however or by whomever created, is not worth a tinker's damn unless it is utilized to get needed *action*. Never was public sentiment more favorable to the railways than during the last two years. Never, owing to failure to get fair public treatment of them, were their net earnings worse in proportion to the condition of general business or the net earnings of other industries.

Every day we read advertising in the general press and public relations literature published and distributed at large expense with the purpose of making the public like and admire the railways. Much or most of the money spent on such propaganda is wasted because it is written by men who know little or nothing about the railroads and their problems and does not try to activate public sentiment in support of specific policies. The threat of strikes will not be removed, net earnings will never be made large enough to provide for adequate railway improvement and development, without adoption by government of *specific policies* to reduce subsidized competition with the railways, to protect them from reckless attacks by labor monopolies and to enable management to maintain a reasonable ratio between revenues from operation, on the one hand, and operating expenses and taxes, on the other.

And the adoption of the required specific government policies will be secured, if secured at all, not by the dissemination of generalities about what the railways do for the public, and how fond of them the public should be, but by intelligent advocacy and courageous fighting for the specific policies that should be adopted by government to afford private management a real opportunity to carry on.

MOVING TROOPS AND MATERIEL REQUIRES MEN AND MATERIALS

During World War II the Office of Defense Transportation frequently failed to obtain essential allocations of critical materials for the transportation industry, and the War Manpower Commission was unable to obtain deferments from military service for experienced personnel engaged in work, such as railroading, which was vital to the prosecution of the war. Plans and legislation now being drafted to set up materials controls and selective-service procedures for future emergencies should embody provisions calculated to prevent a recurrence of such conditions.

With respect to critical materials, the O.D.T. was empowered in World War II only to advise the Supply Priorities and Allocations Board as to the essential requirements and to recommend allocations of materials necessary for the provision of adequate domestic transportation service. Other departments, such as the armed services and Maritime Commission, obtained allocations of critical materials and components without civilian screening to evaluate the stated requirements; and without adequate determination as to whether the excess materials requested would affect the civilian population and economy or not. This was also true of certain other war agencies, such as the Lend-Lease Office, Office of Inter-American Affairs, and the United Nations Relief and Rehabilitation Administration. And the situation was not corrected until after the Controlled Materials Plan of the War Production Board became fully effective.

Any future planning along this line should properly protect O.D.T. in its requirements for domestic transportation, and agencies concerned with the nation's other vital requirements, such as those for food, housing, utility services, and fuel. To do this there should be included, in any orders or laws providing for the control and apportionment of materials, a stipulation to the effect that certifica-

tion of approval, modification or disapproval of limitation orders must be obtained from agencies charged with responsibility for those portions of the civilian economy affected by such orders.

Also, there should be enacted legislation paralleling the World War II law which authorized accelerated depreciation (permitting a 3- or 5-year write-off) of facilities, including transport facilities and equipment, required in the prosecution of the war. In addition, there should be an amendment to the Internal Revenue Code whereby railroads could take credit against their taxes in the amount of maintenance expenditures they would normally make, but are forced to postpone because of inability to obtain materials, manpower shortages, or other reasons.

As to manpower, persons familiar with the impact of the World War II draft on railroading are of the opinion that the Selective Service Act was too arbitrary in that it gave the director of Selective Service insufficient discretionary power.

Any new selective-service legislation should contain provisions designed to correct that situation, since it had serious effects on the effort to maintain adequate forces of properly trained personnel in essential industries. It would seem that the law should designate essential industries which should be protected by deferments, with some indication of the number and character of occupations requiring experienced personnel. Employees in such occupations should be excluded from the military draft. To do other than this would produce the same undesirable situation that occurred in World War II, when the draft took men out of industries essential to the prosecution of the war, thereby handicapping that prosecution.

A COMPETITOR SUGGESTS COMPETITION

Probably it would be an excellent thing if railroads now were to be largely or even entirely freed from governmental supervision and regulation of their services, rates, financing and operations—from all government controls, except safety regulations. These economic controls were established to deal with what was believed at the time to be an inherent monopolistic character of railroad operations. That is no longer true, if it ever was, and the supervision and regulation of railroads by government bureaucracy is an anachronism in a country that purports to be free, and desires to enjoy the stimulation and advantages of competition in a free market. . . .

Does not the current condition of railroads offer a monumental example of the evil consequences of governmental interferences with economic matters? The record of this progressive deterioration through the decades of the railroads' ability to successfully meet their financial problems, to replace antiquated equipment and modernize their facilities is in itself a cogent commentary upon their low vitality, judged by top notch standards, and is in strange contrast to early railroad history when their managements displayed the vigor characteristic of the free.

—B. E. Hutchinson, chairman of the Highway Policy Committee of the Automobile Manufacturers Association, at the Institute of Traffic Engineers' annual dinner at Detroit, Mich.

A. R. E. A.'S BIGGEST YEAR

For fifty years the American Railway Engineering Association has been quietly plugging away at its self-appointed task—"the advancement of knowledge pertaining to the scientific and economical location, construction, operation, and maintenance of railways."

Evidence of how well it has succeeded is to be found in both its 2,100-page Manual and copies of its voluminous annual proceedings.

But these engineers are not given to self-advertising, and the consequence is that many railway men of all ranks in other departments have less than an adequate appreciation of the contribution that the A.R.E.A. has made to the advancement of the railway industry.

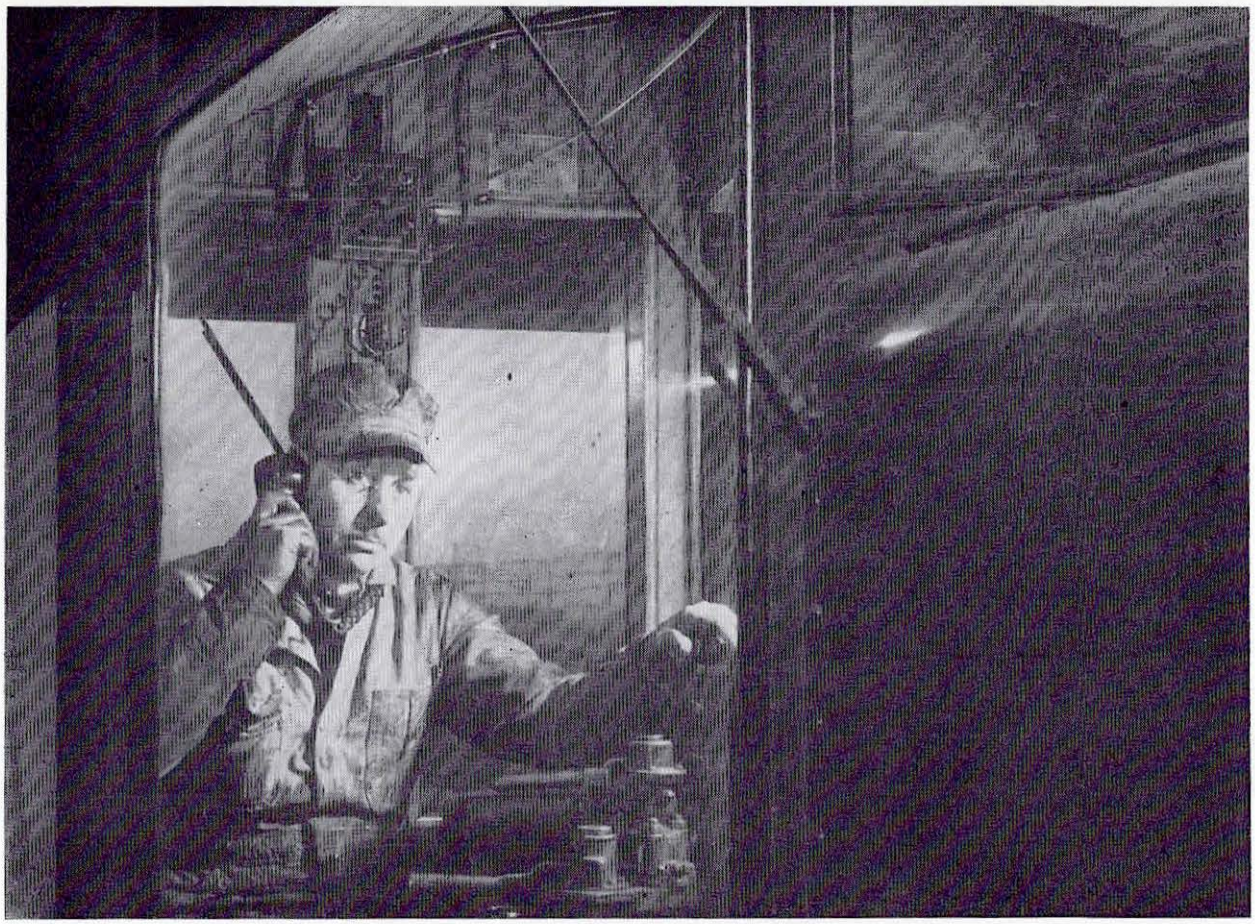
In view of this, it is gratifying to note that, in commemoration of its semi-centennial year, the association is planning a program of special activities which is certain to be effective in enlightening non-engineering railroaders regarding the A.R.E.A.'s vital role in furthering the welfare of the industry. Also, by recapitulating the achievements of the association, the program should stimulate a feeling of pride in the work of their organization on the part of the members themselves.

Plans for celebrating the semi-centennial year are beginning to take shape under the leadership of President C. H. Mottier. The objective is simply to emphasize in a constructive manner the part that the association has played in promoting better engineering on the railroads, and to point out the opportunities for service to the industry in the future.

There is no place for ballyhoo in the program, but such plans as have been disclosed indicate that those responsible are not lacking in imagination and showmanship.

Briefly, the plans call for a succession of special activities, carried on as the year progresses, and reaching a climax at the convention in March, 1949. A special committee has the project in charge, and the many standing committees have been asked to cooperate by furnishing information on the accomplishments in their individual spheres of activity and on opportunities for further constructive effort. While the plans for the convention will thus be taking shape there will be various current manifestations of the celebration throughout the year, such as the special anniversary series of articles on different activities of the association, which is appearing monthly in the A.R.E.A. News, and the efforts of a Membership Development committee that has been organized to conduct a drive for new members, geared to this special occasion.

The official slogan has been well chosen for the drive and for the year—"A Past of Achievement —a Future of Opportunity."



STEEL PLANT UTILIZES RAILROAD RADIO

With its fleet of eight Diesel-electric switchers, the Weirton Steel Company expedites intra-plant operations and overcomes delays due to adverse weather

By C. J. ANDERSON
Electrical Engineering Department
Weirton Steel Company
Weirton, W. Va.

Top—Engineer in locomotive cab using radio telephone to talk with the yardmaster

Left—Control panel and microphone are located conveniently on yardmaster's desk

Facing page—Plan showing locations of tracks and buildings in the industrial and interchange area of Weirton

The Weirton Steel Company has installed radio equipment in the yardmaster's office and on eight Diesel-electric locomotives used for switching approximately 23,000 cars monthly on the 36 mi. of tracks in its plant area at Weirton, W. Va. Communication between the office and the locomotives, which handle all intra-plant and connecting railroad switching, expedites dispatching, overcomes bottlenecks caused by adverse weather conditions, cuts time losses in refueling and eliminates waste motion. Seated at his desk the yardmaster has a schedule before him showing the various jobs being performed by the locomotives. When he presses a button on a desk microphone, a red light flashes to show that the "line" is available. In a conversational tone he may say, for example: "Yard office to engine 207."

Engine 207 will immediately acknowledge the call, and the yardmaster will issue an order such as: "After completing your present shifting, proceed to the stockhouse, pick up two empties and spot them on track 7 at the warehouse. Call me back when you have finished. We have another job in that area." The engineer of 207 will immediately acknowledge this order and proceed according to instructions. This is typical of scores of conversations that take place throughout the day.

Under the old system, a locomotive would finish an assignment and start back to the yard before word could reach the crew that there was another job to be performed in the same general area. Now, the engineer can be informed at once. In the event of breakdowns, crew members formerly often had to walk a long distance to telephone the information to the yard office. Under the present operations, repair crews can be dispatched immediately.

Previously the weighing of cars had to be postponed when there was heavy fog, because the engineer could not see hand signals clearly enough to enable him to spot cars on the scales. With the radio, the work goes on as though no fog existed. This saving of time and manpower is considerable, since fog periods are sometimes lengthy. Also, hundreds of flares are saved yearly, due to the fact that they were the only means of signaling during light fog.

During a severe cold spell recently the coal reserve and the coal-handling situation at Weirton became serious. The greater part of Weirton's coal is normally shipped by river, but, when river traffic was halted, the reserve stock pile was loaded into hopper cars and dispatched to prime points of use. This operation required a constant movement of hoppers, which, when loaded with coal and left standing during cold weather, become frozen.

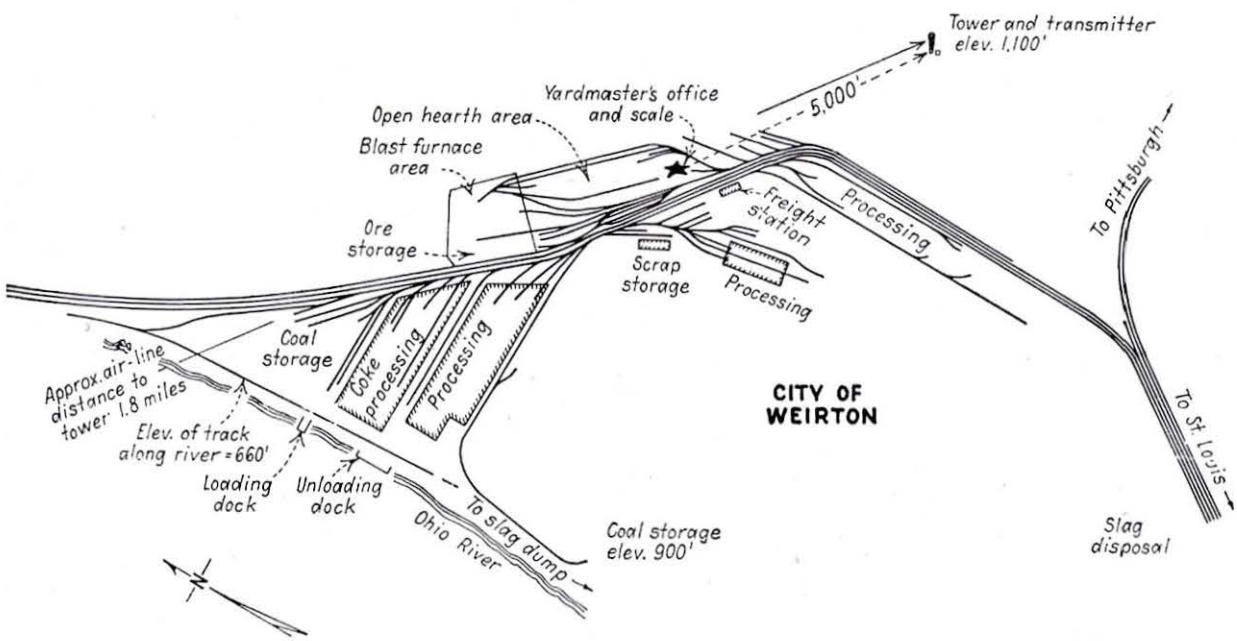
Therefore, at some intermediate point within the mill, an attempt was made to thaw out frozen hoppers or keep loaded hoppers warm. At this point, where it was imperative that the movement of coal not be hindered, the radio equipment proved almost indispensable in overcoming the bottleneck.

Before the installation of radio, time was lost in fueling locomotives. Now, each engineman periodically advises the yardmaster of his fuel supply. This information is logged by the yardmaster so that he knows in advance when locomotives will have to be dispatched for refueling. Frequently a locomotive working at some less important location can be dispatched to a more important point to relieve another for refueling.

The Weirton steel mills are grouped as a compact unit at the bottom of a semi-circular bowl, having a mean elevation of 730 ft. above sea level, and the hills rising on both sides reach an elevation of 1,200 ft. A point having an elevation of 1,100 ft. on the east hill adjacent to the plant and centrally located was chosen as the site for the antenna tower, which is 90 ft. high. At the base of the tower is the transmitter, housed in a brick building 8 ft. square. The transmitter is operated at 25 watts on an assigned frequency of 153.59 megacycles.

Mobile radio equipment is installed in the cab of

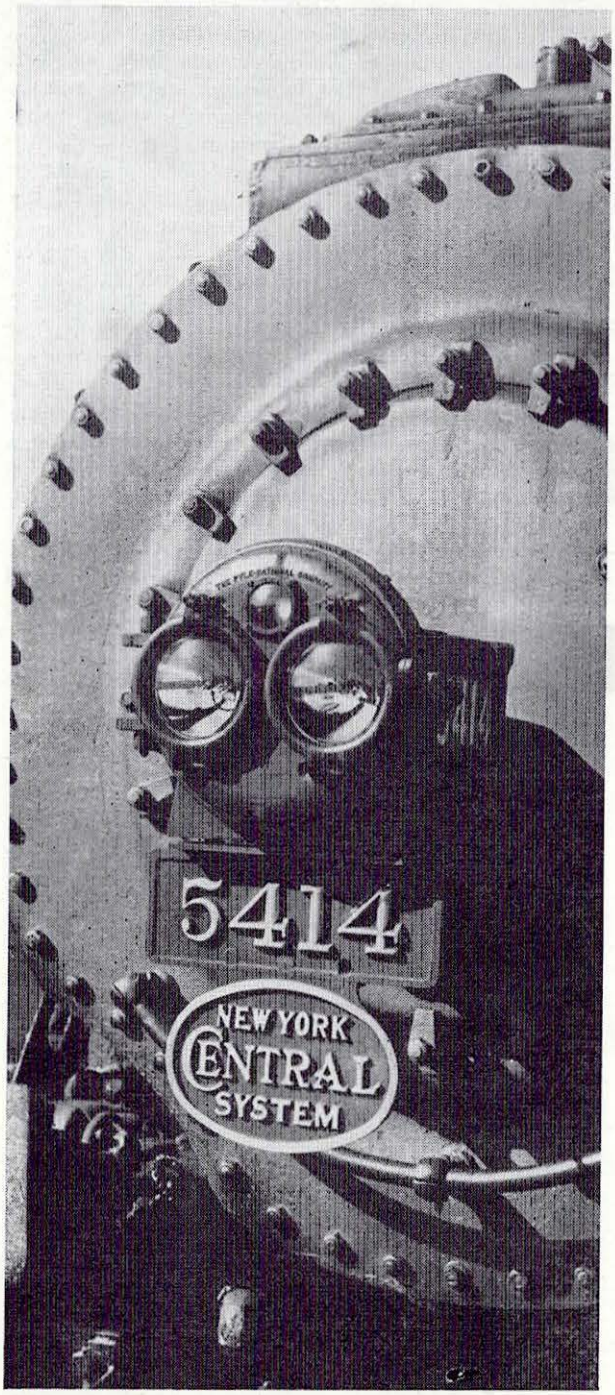
(*Continued on page 47*)



SEALED-BEAM HEADLIGHTS

The New York Central has recently accumulated experience with sealed-beam lamps for locomotives which indicates that they will give better performance than the older type headlights at perhaps no increase in total maintenance cost. The sealed-beam lamps are similar in construction to those used in automobile service except that they do not have spread or diffusing type front lenses. They are rated 200 watts, and they are made for use on 30- and 60-volt circuits. The reflector and the filament are both in a single large enclosing bulb. They need to be alined with the track, but focusing is not necessary.

On the New York Central, two sealed-beam lamps are used to replace a 250-watt P-25 lamp in a 14-in. glass reflector. The filaments are so placed in relation to each other as to cause blending of the beam patterns. The beam is alined by alining the headlight case, and no change is caused by the replacement of the lamps. The two lamps produce about 400,000 maximum beam candlepower, and the beam spreads about 12 deg. horizontally and 8 deg. vertically.



A sealed-beam headlight as used on a New York Central steam locomotive

Under Test Nearly Two Years

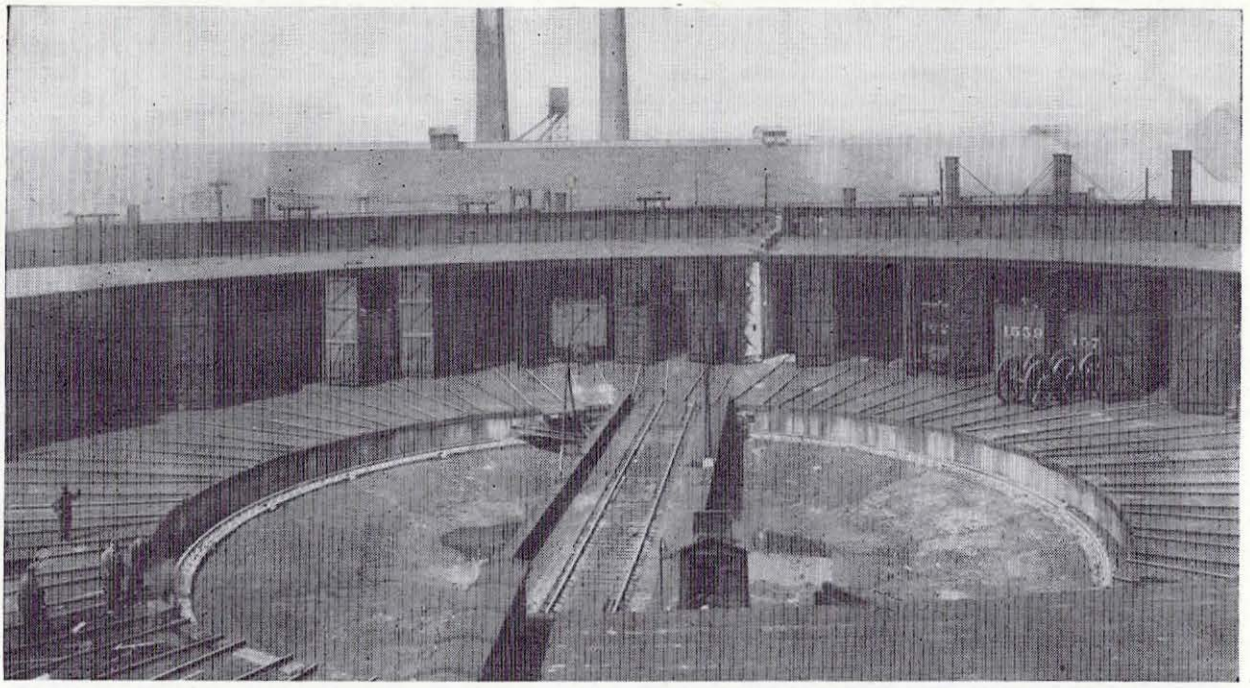
The first application of sealed-beam headlights on the New York Central was made in July, 1946. Two lamps were mounted in the headlight case with the original door and reflector in place. This permitted a return to the old type lamp, if necessary, with no change except the removal of the adapter plate holding the sealed-beam units.

Service tests with this arrangement showed that the life of the sealed-beam lamp was greater than that of the standard lamp in a shock-proof socket, and with the case on rubber mounts. When this was determined, a change was made in October, 1947, to the present arrangement, shown in the illustration. The front door glass and reflector have been dispensed with, and a special door applied. The new door has two 7-in. openings in which two sealed-beam lamps are placed side by side. The headlight case has rubber mounts as previously, but shock-proof mounts are not used for the lamps. A small 15-watt emergency lamp between and above the two headlights is provided as a convenience for replacing lamps. It is connected to the number-plate lamp circuit, since it is necessary to turn off the headlight circuit when lamps are being replaced.

Failure of a lamp en route does not result in complete loss of light. With the old type lamp on passenger locomotives, it is the practice to change out lamps at each second washout period, or every 50 to 60 days. Operation with the sealed-beam lamps indicates that this period may be extended to six months.

The cost of the sealed-beam lamp is nearly twice that of a standard lamp. With three times the service life between change-outs, it would appear that lamp cost of two sealed-beam lamps would be about 30 per cent more than that of the single headlight lamp which they replace. This additional cost is probably more than offset by the absence of the front glass and reflector, the reduced cleaning required and the elimination of socket repairs.

Complete new headlights designed for sealed-beam lamps are under consideration. Such headlights would be considerably smaller in size and lighter in weight. On Diesel-electric locomotives, it is planned to use two lamps in series on 60 volts with a switch and resistance to operate one lamp if the other fails. The headlights and special doors now in service were made by the Pyle-National Company in accordance with designs developed jointly by the manufacturer and New York Central engineers.



C. & N. W. Chicago enginehouse where smoke is controlled by careful firing in conjunction with direct-steaming facilities

SMOKE ABATEMENT ON THE NORTHWESTERN

Use of over-fire steam air jets and other methods described in paper before Transportation Committee of Chicago club*

By W. W. MATZKE
Assistant to Vice-President, Mechanical
Chicago & North Western, Chicago

The Chicago & North Western operates approximately 267 trains in and out of its Chicago passenger terminal daily, of which a large percentage are steam powered. The possibilities of atmospheric pollution, if this amount of power were allowed to operate without restriction, will be appreciated. Many years ago, the railroad recognized this fact and inaugurated a control program, gradually intensifying its efforts each year until it is now regarded as one of the better-behaved railroads in control of heavy smoke.

An examination of the record shows that the number of smoke complaints reported on the C. & N. W. in Chicago, although increasing about 20 per cent in 1946, over the preceding year, decreased 57 per cent in 1947 as compared with 1946 and a further substantial reduction in 1948 is indicated.

Supervision Major Essential

This record was not attained without the expenditure of considerable time, effort and money. On the C. & N. W., two full-time road foremen of engines are assigned solely to smoke-abatement activities within the confines of Chicago and suburban areas. In addition, every road foreman, master mechanic, enginehouse foreman and other supervisor has had impressed upon him the necessity of controlling the firing of locomotives in such a manner that the emission of smoke is held to a minimum and further is instructed to hold himself personally responsible for the proper firing of locomotives in his territory. Every officer, from the president down, is fully aware of the necessity for curtailing excessive smoke and each makes it his personal duty to notify the responsible party in charge when emission of excessive smoke is observed.

When a locomotive is noted smoking excessively, standard instructions are to record the locomotive number, geographical location, time of day, direction of travel, and density of smoke—all of which is immediately communicated to one of the road foremen in charge of smoke abatement who then contacts the engine crew upon their arrival at the terminal, if

*Union League Club of Chicago, April 29, 1948.

possible, and determines the cause of the difficulty. If, during conversation with the fireman, it develops that smoke was caused by reason of non-compliance with rules or regulations or indifference, the employee, if he has no prior record of offense, is cautioned and, if necessary, instructed by example as to the proper method of firing so as to hold smoke to a minimum.

Subsequent to this interview, a questionnaire is sent to the fireman with the request that it be filled out in full and returned promptly. This questionnaire requests information regarding length of service, method of firing, quality of coal, condition of boiler and appurtenances, and last but not least, enables the fireman to explain what, in his opinion, caused the excessive smoke and to offer suggestions to prevent recurrence. Space is also afforded on the questionnaire for the engineer to supply information in case he is involved.

In addition, a case history is kept for each fireman, the first offense being entered on a card placed in an index file. If, at a later date, any fireman is involved in a second smoke complaint, the file is referred to and if, in the judgment of the supervisor, leniency is merited, the man is again warned, given further instruction if necessary, and told that future derelictions will not be tolerated. Should the same man again be observed in violation of instructions, he will then be removed from service and notified to appear for investigation. To aid in obtaining uniform information regarding smoke complaints, all road foremen in the Chicago area are supplied with C. & N. W. No. 2874 blank forms which list the information desired as enumerated previously. When an offense is noted, Form 2874 is filled out and submitted for appropriate action.

Thus by a continual program of impressing upon the minds of engine crews the importance of smoke abatement, the following record has been established on the C. & N. W.: 201 reports of alleged smoke violations in 1945; 242 reports in 1946; 105 reports in 1947; further reduction indicated in 1948.

Supervisors and officers, during their visits to the various enginehouses and offices, have kept engine crews smoke conscious. By continually directing attention to this subject and by personal demonstration, they have constructively progressed the program for elimination of excessive smoke.

Attention to Physical Plant

To aid engine crews in the fine work which they are doing in smoke reduction, the C. & N. W. has installed and attempted to maintain its physical plant in the necessary condition to accomplish this purpose. All enginehouses are, of course, provided with house blower steam to furnish auxiliary draft by means of the smokebox blower, when firing-up a locomotive cold. Standard equipment also includes compressed-air oil torches and oiled shavings. At two enginehouses in Chicago, the railroad has installed direct-steaming facilities which, though quite expensive, not only reduce smoke but result in considerable economy through reduction in labor, amount of locomotive coal used, and maintenance of locomotive boilers by reason of reduced number of staybolt and side-sheet replacements. With this system, house steam and water are supplied to the locomotive at approximately 100 lb. pressure so that when the fire is lit, there are no cold surfaces to interfere with combustion and result in smoke. Furthermore, by reason of this preheating, the

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Below—Type of form used by road foremen and other supervisors on the C. & N. W. in reporting smoke observations. Facing Page—Questionnaire which is filled in by locomotive crews in cases of smoke complaints

Form 2874

CHICAGO AND NORTH WESTERN RAILWAY COMPANY
SMOKE OBSERVATION REPORT

DATE _____, 19_____

LOCOMOTIVE NO. _____ SERVICE Yard _____ Switching _____
Freight _____ Moving _____
Passenger _____ Standing _____

POPS Open _____ SMOKE BURNER On _____ BLOWER Cracked
Closed_____ Off_____ Wide Open _____

OBSERVATION MADE FROM _____A.M. to _____A.M.
_____P.M. to _____P.M.

LOCATION_____ DIRECTION East_____ WEATHER Clear _____
West_____ Rain _____

ENGINEER_____ DENSITY OF SMOKE
#1 #2 #3 #4 #5

FIREMAN_____ Minutes

OBSERVER _____

duration of firing-up is materially reduced—thus providing another economy resulting from fast turning of the locomotives which produces higher availability.

As an additional aid in suppression of smoke, all C. & N. W. Chicago area locomotives are equipped with over-fire steam air jets. These jets are inserted in tubes in the firebox water legs; there are four to five tubes in each side of the firebox. The jets are located about 2 ft. above the grates and project a stream of steam-inspirated air transversely across the firebox. By this action, turbulence in the firebox is increased, thus promoting better mixture of the air with combustion gases. Owing to the deficiency of oxygen because of space limitation in a locomotive, the air thus introduced helps by promoting more complete combustion with attendant decrease in smoke.

Excessive and prolonged black smoke coming from a locomotive not only constitutes a source of atmo-

NAME OF RAILROAD

SUBJECT: VIOLATION OF CITY SMOKE ORDINANCE

Engine No._____ Date_____ Hour_____

Place_____ Kind of Work_____

QUESTIONNAIRE OF ENGINEER

1. a Indicate by check whether any defects developed in equipment listed below while the engine was in your charge on day of violation
   - Blower _____
   - Steam-Air Jets _____
   - Flues _____
   - Arch _____
   - Grates _____
   - Stoker _____

   b Was engine equipped with (answer yes or no)
   - Steam-Air Jets _____
   - Arch _____
   - Combustion Tubes _____

2. Which of the following units were in use at time of report of
   - Blower _____
   - Steam-Air Jets _____

3. Did you call fireman's attention to above smoke violation? _____
4. Was engine steaming? _____
5. Cause of engine not steaming and did you report this on leaving engine?

   _____

   _____

6. a Was engine moving
   1. Upgrade _____
   2. Downgrade _____
   3. On straight-away _____
   4. On curved track _____

   b Indicate by check whether load coupled to engine was
   1. Heavy _____
   2. Light _____

7. What in your opinion caused the smoke violation?

   _____

   _____

   _____

8. Suggest steps that can be taken to eliminate similar occurrences in the future

   _____

   _____

   _____

Signed _____
Engineer

QUESTIONNAIRE OF FIREMAN

1. How long have you been firing
2. Check your method of firing
   - Horseshoe (side bank) _____
   - Center Bank _____
   - Spreading (level) _____
   - Alternate _____
   - Other method (describe below)

   _____

   _____

   _____

   _____

3. What was condition of fire at time of smoke violation?

   _____

   _____

4. Describe coal supplied engine on day of smoke violation
   - Quality_____
   - Kind _____
   - Size _____

5. Which of the following units were in use at time of report of dense smoke?
   - Blower _____
   - Steam-Air Jets _____

6. Was engine steaming?
7. Cause of not steaming and did you call engineer's attention to this

   _____

   _____

   _____

   _____

   _____

8. What in your opinion caused the smoke violation?

   _____

   _____

   _____

   _____

   _____

9. Suggest steps that can be taken to eliminate similar occurrences in the future

   _____

   _____

   _____

Signed _____
Fireman

spheric pollution but represents inefficient railroad operation. Black smoke is made up of unburned particles of carbon, and these particles contain the B.t.u. that we expect to obtain when coal is purchased. Therefore, a two-fold purpose is accomplished when locomotives are fired so that a clean stack is the result.

Oil Firing Improved

Several years ago, the C. & N. W. commenced a program for coverting nine Class E-4 locomotives to oil burners. These locomotives were built in 1938, are of the 4-6-4 wheel arrangement, with 300 lb. pressure boilers, and are used in high-speed, main-line passenger service between Chicago and Omaha, Neb., in conjunction with Diesel locomotives. At the time it was thought that this would solve the smoke problem with this particular class of locomotive; however, because there is no generally accepted formula for installation of locomotive oil burners, considerable experimentation and research were found necessary to develop a satisfactory installation.

After a comprehensive study of such factors as the burning temperature of fuel, air supply, air velocity, atomizing properties of superheated versus saturated steam, and oil consumption, an installation was made last year on one of these locomotives which, so far, has proved very satisfactory as regards reducing oil consumption, minimizing smoke emission, and attaining good steaming qualities. This installation included a pre-combustion chamber, or dutch-oven, with a flared refractory outlet immediately beyond the oven to burn the atomized oil by radiation from the hot refractory surfaces while the oil vapor stream is traveling along the center of the firebox. The oil-burning nozzle was moved so as to be farther from the door-sheet flash wall, and by means of multiple air-tube installations in the pan, an additional supply of secondary combustion air was afforded, all of which resulted in increased locomotive efficiency and smokeless combustion.

At the same time, this oil-burning locomotive received an all-welded boiler, and during the subsequent nine months of operation, it has shown no evidence of staybolt pulling or firebox-sheet burn, and this smoke-free characteristic has been the subject of much favorable comment. Freedom from overheating the firebox sheets and increased combustion efficiency demonstrated from this installation has resulted in adoption of this design as standard for all nine locomotives of this class, of which, so far, six have been so equipped.

Smoke Violations Reported Promptly

The C. & N. W. would like nothing better than to have all of its steam locomotives operating smokelessly, and attempts to do everything practicable to accomplish this result. In an effort to elicit comment from outsiders and thus help the program, the railroad has cooperated with the General Managers' Association of Chicago in compiling a directory, listing the names of each Chicago railroad officer responsible for his company's smoke-abatement program. Copies of this directory have been sent to all railroads and the city smoke abatement bureau in sufficient supply so that all employees directly concerned with smoke abatement may have a copy. Thus, should any locomotive, regardless of ownership, be observed emitting excessive smoke by any person, regardless of railroad affiliation, means are provided so a responsible officer of the owning road can be notified immediately, given all pertinent data regarding locomotive number, direction of travel, density of smoke, and time of day so that by the time the locomotive reaches the terminal, the crew can be presented with the facts and the cause determined immediately, with excellent chance of preventing a recurrence.

If all concerned will cooperate 100 per cent in this effort, atmospheric pollution, as the result of excessive and prolonged steam locomotive smoke emission, will disappear.

I wish to acknowledge publicly that, while Frank Chambers, chief deputy smoke inspector, has been unrelenting in his program to force the railroads to comply with the City of Chicago smoke ordinance, he has, at all times, been fair, and a survey of the many stacks in Chicago will disclose that this program has attained considerable success.

NEW BOOK

FREIGHT RATE APPLICATION, by Glenn L. Shinn. 160 pages. 6 in. by 9 in. Bound in cloth. Published by Simmons-Boardman Publishing Corporation, 30 Church street, New York 7. $3.50.

This modest-sized volume is, in strict sense, a "commentary" on what the law, the courts, and the Interstate Commerce Commission have had to say about the application of published freight rates when alternatives or ambiguities raise doubts. The author has served in various capacities with the carriers and with the commission (he is now an attorney examiner therefor) for the past 17 years, during which time he has established himself as an authority on the legal interpretation of freight tariffs.

According to section 6 (7) of the Interstate Commerce Act, it is the legal duty of the carriers to collect, and the shippers to pay, charges based upon the rates "which are specified in the tariff filed and in effect at the time." The chief purpose of Mr. Shinn's commentary is to attempt to resolve the doubts which arise when more than one rate or route seems to be applicable or when other ambiguity exists. It is in no sense a general discussion of rate-making or the principles thereof or an analysis of the construction of tariffs.

The author states that the material in the book was originally put together as a convenient reference for his own use, but that, as the work progressed, it appeared that it might be useful for a wider audience. With such an origin, naturally, this monograph must be, and is, a thoroughly honest and down-to-business work. It was conceived as an aid, and not as a means of "getting into print."

Among its more important ready-reference portions is a list of priorities to be utilized when there is possible application of different kinds of rates. Unlike most fields of inquiry, the search for the correct rate proceeds from the special to the general. Thus a commodity rate applies to the exclusion of any class rate, and the joint or through rate applies to the exclusion of combination rates, and so down the line. The author also presents a valuable discussion of what logic and precedent would deem the proper interpretation of a reasonable route in the case of open route tariffs.

C. M. HUTCHINS ELECTED PRESIDENT OF BANGOR & AROOSTOOK; W. F. CRAM CONTINUES AS CHAIRMAN OF THE BOARD

Curtis M. Hutchins

Wingate F. Cram

Curtis M. Hutchins, whose election as president of the Bangor & Aroostook to succeed Wingate F. Cram, who remains as the company's chairman, was reported in *Railway Age* of May 8, page 70, was born in Boston, Mass., and was graduated from Williams College in 1928. After attending the University of Maine's School of Forestry for one year, he joined the Dead River Company, one of the largest pulpwood dealers in the northeast. In 1935 Mr. Hutchins was elected president of the firm, which also has a substantial gasoline distribution business in Aroostook and Washington counties, Maine. During World War II he served for a time in the Navy and also handled pulpwood production for the War Production Board. He has been connected with bituminous coal mining and distribution as vice-president and a director of William C. Atwater & Co. of New York, and as a director of the American Coal Company of Allegany County. Mr. Hutchins was a member of the Bangor, Me., city council from 1941 to 1943, serving, in the latter year, as chairman of the council. He also was a member of the Main state legislature in 1943, and was elected a director of the Bangor & Aroostook in 1944.

Mr. Cram, the retiring president, was born in Bangor on December 4, 1877. He was graduated from Harvard College in 1900 and studied for one year at the Columbia University School of Law. Mr. Cram entered railroad service on October 1, 1901, working in the office of the president of the Aroostook. Subsequently he became general assistant to the president and, on June 9, 1909, he was appointed corporation clerk. He served as treasurer from November, 1917, to April, 1936, when he was elected president. Four years later he also was elected chairman of the board.

The Bangor & Aroostook at the end of 1947 owned and operated 259.49 mi. of main line (from Searsport on Penobscot bay inland in a northerly direction to Van Buren on the St. John river at the Canadian boundary) and 236.83 mi. of branch lines, and operated 5.64 mi. under trackage rights, all in the state of Maine. The company, incorporated under the general railroad laws of the state on February 13, 1891, owns all the capital stock of the Van Buren Bridge Company, which connects its system with the Canadian National by international bridge between Van Buren and St. Leonard, N. B. It also owns all the capital stock of the Northern Telegraph Company and the Bangor Investment Company. At Searsport the company owns tidewater terminal, pier, warehouse and extensive yard facilities. In addition to the connection withe Canadian National, the Aroostook connects with the Maine Central near Bangor and with the Canadian Pacific at Greenville, Houlton, Fort Fairfield, Presque Isle and Brownville Junction.

Directly serving Aroostook county, the largest potato growing district in the United States, the road's most important revenue producer is potatoes. Next in importance are lumber, pulpwood and paper products. Plants of the Great Northern Paper Company, the country's largest newsprint producer, are served at Millinocket, East Millinocket and Madison. Freight revenue is derived not only from the processed articles received from these plants but also from the raw materials delivered to them. Although these products as a group have exceeded potatoes in total amount of the road's tonnage in some years, the more lucrative rate for hauling potatoes has made the latter product the road's most important source of revenue.

On December 31, 1947, the road's outstanding common stock totaled 141,792 shares and all 38,280 authorized shares of cumulative convertible 5 per cent preferred stock were outstanding. Long term debt amounted to $14,437,159, compared with $16,700,000 at the end of 1937, the end of Mr. Cram's first full year as president. Operating revenues last year were $12,135,677, compared with $6,185,676 in 1937. Operating expenses totaled $8,943,986, compared with $4,100,561. Fixed charges were $551,581, compared with $724,211, and net income was $1,164,549, compared with $845,224.

GIRDER SPANS FLOATED TO NEW SUPPORTS

The Louisville & Nashville, in renewing the substructure of a long bridge, built concrete-capped pile piers of unusual design on the same alinement and shifted the superstructure into position on them

General view of the bridge looking east as preparations for moving the first span were under way

By adopting a special bridge pier design, the Louisville & Nashville recently found it possible to renew the substructure of a long multiple-span girder bridge, near Mobile, Ala., without changing the alinement and without interference with or by traffic, thereby effecting large savings as compared with conventional designs and methods.

The Old Bridge

In the scheme adopted, the new piers were constructed midway between the old ones on the existing alinement and the existing spans were floated into position on them on barges. The primary element in this procedure was the adoption of a design for the new piers involving groups of composite steel-pipe and concrete piles capped with concrete beams. By arranging the piles in each pier in such a manner that they could be driven outside the limits of the existing structure, it was possible to avoid any conflict between train movements and the work of driving the piles, thereby permitting the latter work to proceed without interruption.

This project is located near Gautier, Miss., about 40 mi. west of Mobile, where the bridge involved carries the single-track line of the Mobile-New Orleans subdivision across the West Pascagoula river. The bridge is situated about a half mile inland from the Gulf of Mexico, where the river is approximately ½ mi. wide, but since the river at this point is not classified as a navigable stream, no provision for a movable span is necessary. The structure was built between 1901 and 1904. Beginning at the east, or Mobile, end it consisted of a 612-ft. open-deck timber-trestle approach, eleven 97-ft. through-girder spans on timber-pile piers, another 150-ft. trestle, then three more through-girder spans on pile piers, and, at the west end, a 207-ft. timber-trestle approach. All timbers and piles were treated with creosote.

The piling in this structure was continually under attack by teredos, making necessary annual inspections by a diver and frequent replacement of damaged piles. In the case of the pile piers, already loaded to the maximum safe limit, replacement of piles was difficult, expensive and unsatisfactory. In the spring of 1944 the railroad officers decided that further ade-

quate repairs to the timber-pile piers were impracticable, and that they should be either redesigned and completely rebuilt, or replaced by different construction. The existing through-girder spans were in good condition and considered adequate for all motive power contemplated in the foreseeable future.

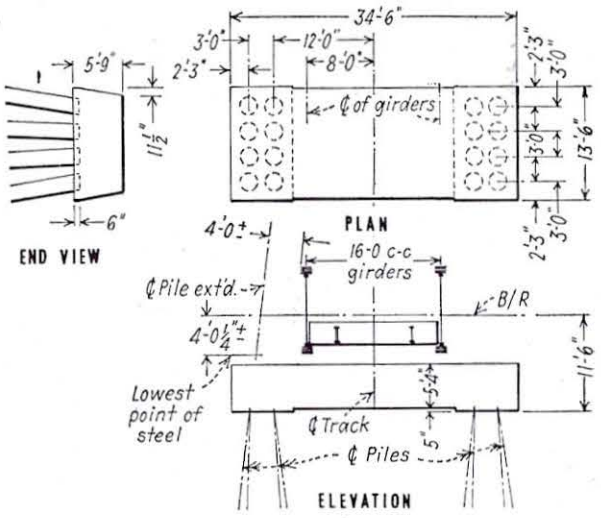
Studies for New Bridge

In making studies of this problem, considerable thought was given the fact that the structure is located in a region subject to violent tropical hurricanes. While no great damage to this bridge had occurred since its construction, nearby crossings of other waterways had been severely damaged during that period. Serious consideration was given, therefore, to the advisability of replacing the substructure with one designed to resist damage by hurricanes. Furthermore, it was desirable from an operating standpoint and for reasons of economy to retain the bridge on the existing alinement—a three-mile tangent. This would permit utilization of the existing stable approach embankments which extend through marshy areas. It was realized, of course, that such reconstruction by conventional methods would require a temporary trestle to carry traffic during construction. Such a trestle would be expensive and subject to the hazards of possible storms. In addition, procurement within a reasonable time of the long timber piles required for a trestle was extremely doubtful.

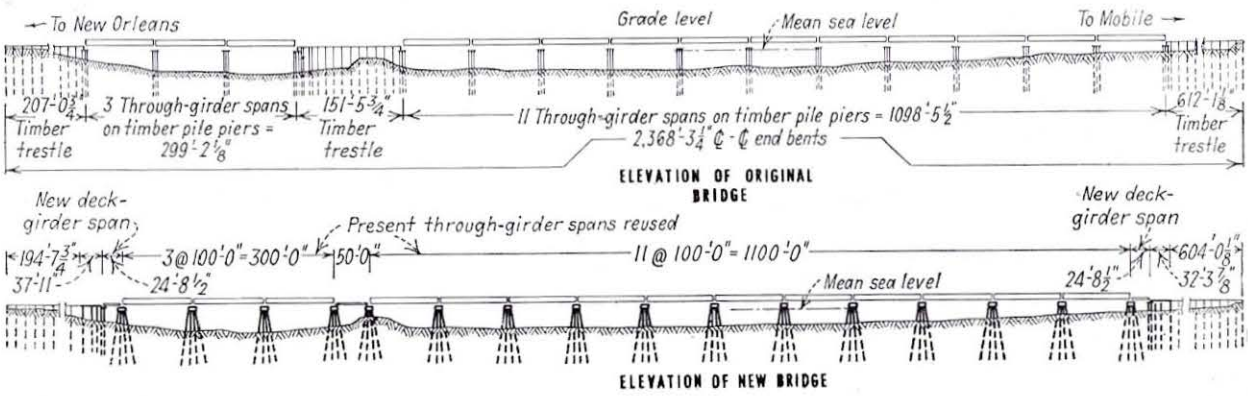
To further its study of the problem, the Louisville & Nashville requested Modjeski & Masters, consulting engineers, to make a report on the existing structure and to make recommendations and estimates for a new structure. The report of this firm confirmed the railroad's opinion that the timber piers had reached the end of their useful life. Plans advanced by Modjeski & Masters contemplated using new through-girders on concrete-pile piers, or, as an alternate, truss spans on open-dredge piers. Both plans provided for using steel beams on concrete-pile bents for the approaches. Either type of structure could, of course, be constructed on the existing alinement or on a new one.

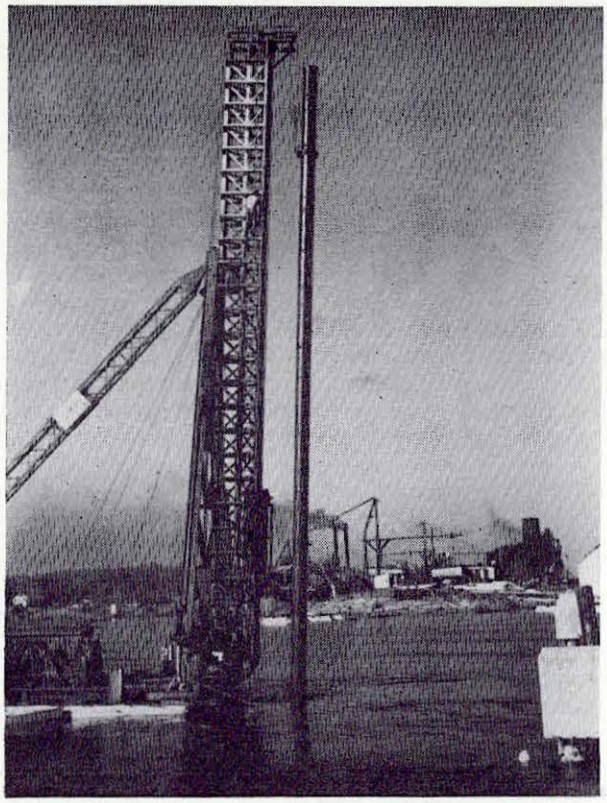
All these studies led to the development by the railroad of the plan finally adopted, which permitted rail traffic to continue to use the existing structure while a new substructure was constructed on the original alinement. Briefly, this plan involved the construction of new piers, 16 in all, at locations approximately midway between the old timber piers, and the shifting of the old 97-ft. girder spans longitudinally into position onto the new piers. It was contemplated that the 150-ft. length of pile trestle in the bridge would be eliminated by shifting the girder spans on both sides toward this trestle and by inserting a new 50-ft. deck-girder span to fill the remaining gap. A 25-ft. deck-girder span and an additional short trestle section were to be constructed to fill the gap at each end of the main structure created by the movement of the girder spans. The old pile trestle approaches, being in good condition, were not to be disturbed.

Prior to starting work on the project the base of rail was raised 2 ft. to a new permanent grade line. The 2-ft. raise of base of rail on the old structure was made, in the case of the steel spans, by jacking up the spans, in 8-in. lifts, in synchronization with the raise in the approach trestles, the spans finally resting on 24 in. of timber blocking between the shoes and the tops of the old piers. The maximum difference in elevation between the two ends of any one span was limited to 8 in. during the raising process.



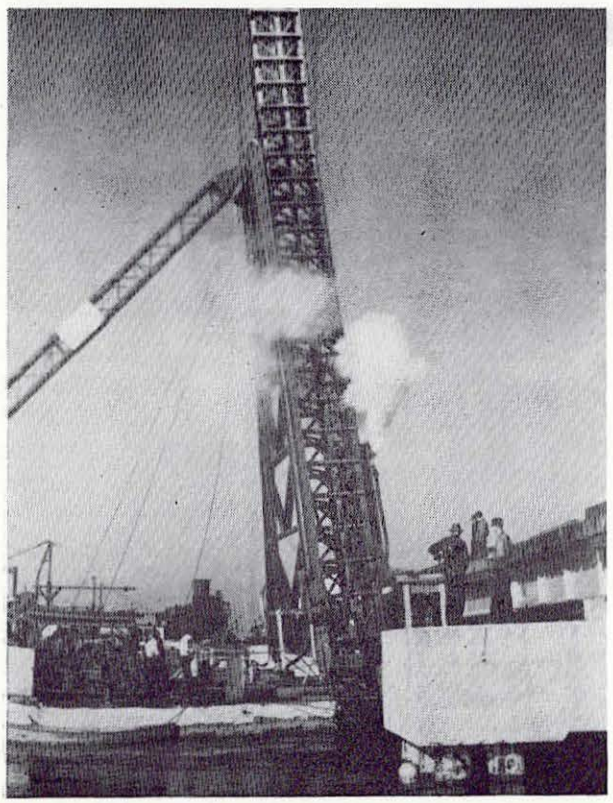
Below—Elevations of the bridge before and after the existing spans were shifted to new piers. Note that the intermediate length of timber trestle was eliminated. Right—Plan, elevation and end view of one of the new piers, showing the concrete cap and the arrangement of the piling





Floating pile driver lifting one of the steel tubular piles into position for driving

The design of the new piers permitted the piles to be driven in the clear of the existing structure



Since the north and south approach trestles were to be re-used in the finished structure, the permanent raise in these structures was made with treated timber inserted between the existing stringers and caps of the bents, using both longitudinal and cross blocking to maintain the stability of the deck. The actual amount at any time was variable, but was limited to a maximum of 8 in. Temporary blocking was utilized to limit the maximum difference in blocking between two adjacent bents to one inch. These limitations made it possible to maintain traffic on the line without interruption.

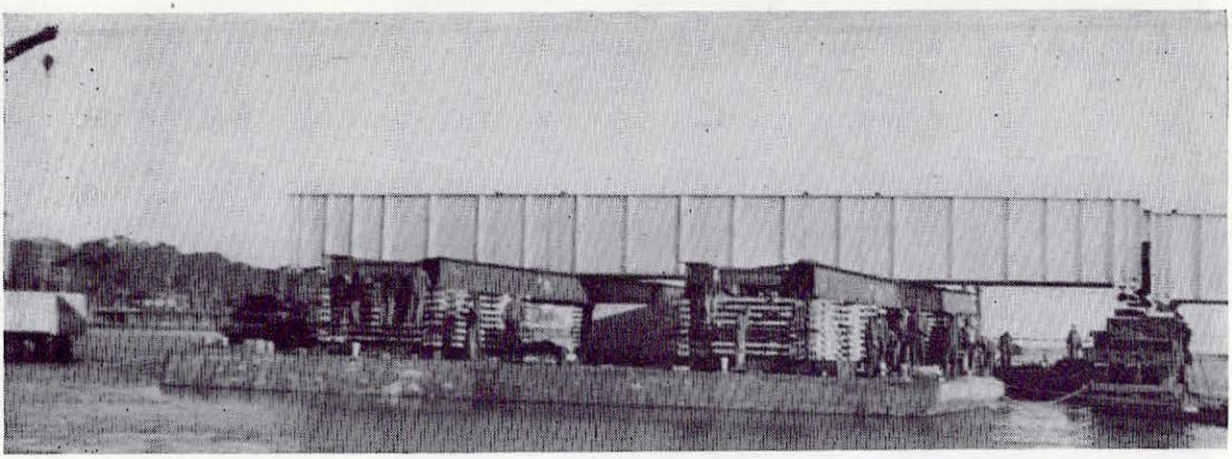
The Composite Piles

Of special interest in connection with this project was the design chosen for the new piers. This design provided for driving the piles in two groups, with a reinforced concrete cap, acting as a beam, between them. As stated before, each group of piles was to be driven outside the limits of the existing bridge to avoid any conflict between train movements and the pile-driving work.

The piles in these piers are made of Armco 24-in. spiral-welded steel tubing having a wall thickness of ½ in. At the bridge site two 40-ft. sections of pipe, one having a shop-attached conical cast-steel point, were welded together to form a unit about 82 ft. long. This tube was driven as a closed-end pile by a floating pile driver into an underlying sand stratum. After cut-off at the desired elevation a fully-reinforced concrete pile was cast in the pipe, the concrete for each pile being poured in one continuous operation. The longitudinal reinforcement, consisting of 1¼-in. square deformed bars, was allowed to extend above the tops of the piles to be fully developed into the pier cap. Longitudinal bonding bars of 1¼-in. square steel, also for development into the cap, were welded to the top of each pipe. This particular composite design for the piles was suggested by Modjeski & Masters, and was adopted as offering the advantages of greater strength as a column and easier handling and driving due to the relatively light weight of the pipe.

For each pier 16 piles were driven in two groups of eight piles, one group at each end of the pier. Each group of piles was arranged in two lines of four piles each, placed parallel to the center line of track, the spacing at cut-off elevation being 3 ft. between the center lines of the rows and 3 ft. between the center lines of adjacent piles in each row. The distance from the center line of the inside row of piles in one group to the inside row of piles in the opposite group is 24 ft. All piles were driven on batters varying from 1½ in. in 12 in. to 2 in. in 12 in. The batter arrangement is such that the points of the piles in each pier are spread outward both laterally and longitudinally in order to distribute the loads over as large an area of the bearing stratum as practicable. This arrangement also causes pairs of piles to act as "A" frames in resisting traction and lateral forces.

The pipes were driven by a floating pile driver with a single-acting hammer having a 10,000-lb. ram and an energy of 32,500 ft.-lb. Since all of the piles came to final bearing in a sand stratum, their load capacity was determined by calculation from a dynamic



One of the 97-ft. spans resting on the lifting beams between the barges, ready to be pulled to its new location by the locomotive crane (end of boom visible at left)

pile-driving formula, for which the constants representing the elastic compression of the pipe and the soil were determined by taking autographic records of the axial movement of the pile head. This determination was made, however, only for a few piles whenever there appeared to be a noticeable change in the action of the pile under the hammer.

The forms for the pier caps were supported on beams hung from the pier piles. These caps, each containing 86 cu. yd. of concrete, were each cast in one continuous pour without construction joints. The reinforcement was designed in such a manner as to permit the cap to act as a beam. Each cap is 34 ft. 6 in. long at right angles to the track, and 13 ft. 6 in. wide parallel to the track. It is 5 ft. 9 in. deep where supported on the piles, while the depth of the remainder is 5 ft., 4 in.

After completion of the new piers the work of moving the existing 97-ft. through-girder spans from the old piers to the new ones was begun. There were 14 of these spans to be moved parallel to the track a distance of 50 ft. Although the substructure work was done by a contractor, the railroad decided to move the spans with its own forces in order that this work could be coordinated more closely with train movements. A train schedule was arranged to allow a three or four-hour period during daylight to move the spans.

After studying several schemes for moving the spans, it was decided to use barges. When preparing to move a span a barge was placed on each side of it and parallel to the track. Four 36-in. steel beams were placed between the barges transversely below the bridge girders. These four beams were fabricated into two units, each unit consisting of two beams spaced 12 ft. 1½ in. between centers and tied together with a complete lateral system. The two units, 92 ft. long overall, were spaced 36 ft. 4½ in. between centers on each barge. The barges themselves were spaced 72 ft. center to center. By means of jacks and blocks between the beams and the barges, the weight of the girders, complete with shoes, deck and rails (amounting to 120 tons), was transferred from the piers to the barges and the span was then jacked up sufficiently to permit supporting beams to clear the old piers as the barges bearing this load were moved forward.

Both barges were of all-welded steel construction, completely decked over, one being 100 ft. by 26 ft. and the other 75 ft. by 34 ft. To protect them from concentrated loading while carrying the weight of the girders, additional distributing beams were arranged on the deck so that the loads were supported at 12 predetermined points on each barge, these points being the intersections of transverse and longitudinal stiffening trusses inside the hull. While they were being loaded the barges were anchored to pile dolphins, or to concrete block anchors locked upstream, and after being loaded they were pulled forward to the new location of the span by a line from a locomotive crane operating on the track. The span was then lowered into position on the new piers. The moving of each span caused a gap about 50 ft. long to be created in the bridge, which was filled by a temporary girder span to permit traffic to be resumed until the next span-moving operation. In shifting the spans the east group of 11 spans was moved first. These spans were moved in succession beginning with the west span. The west group of spans were then moved in succession beginning with the most easterly span.

The sixteen new piers were constructed under contract by the Maxon Construction Company, Dayton, Ohio. All other work was done by the railroad. Pile driving was begun in April, 1947, and the entire substructure was completed in November, 1947. The work of moving the spans was started on January 6, 1948, and was completed on February 18, 1948. Between February 6 and February 15, inclusive, no spans were moved because of heavy traffic due to the Mardi Gras celebration at New Orleans.

All the work was carried out under the general direction of C. H. Blackman, chief engineer of the Louisville & Nashville, with the design and execution of the work being under the supervision of C. K. Bruce, associate bridge engineer. R. B. Lindsey was resident engineer until September 1, at which time, having been promoted to assistant division engineer, he was succeeded as resident engineer by Major Claude Johnston. W. R. Pierson was general superintendent at the site for the Maxon Company.

J. L. Webb

Mechanization of freight stations and other terminal facilities was widely discussed at the Freight Station Section meeting. The Towmotor is working on a Louisville & Nashville pier at New Orleans

FREIGHT STATION SECTION MEETS

Annual meeting at Buffalo reveals agents' concern with loss and damage, high handling costs, and public relations aspect of job

Papers presented, and discussion following, at the annual meeting in Buffalo, N. Y., of the Freight Station Section of the Association of American Railroads, May 19-21, showed that the freight agents are well aware of the many difficulties that competing forms of transportation and the present economic situation have brought to the railroads. And, although many varied and vexing operating problems were brought up for discussion, it was evident that all present were particularly concerned with the public relations aspect of their jobs. Public relations, in their book, was spelled "service," and the lack of it would be the main factor in keeping the railroads from continuing as going concerns.

"Local Ambassadors of Management"

This attitude on the part of the members of the section was both praised and brought into sharper relief by the executives who spoke at the several sessions of the group. F. A. Dawson, vice-president of the New York Central, told the assembled agents that they were in a "very real sense public relations representatives of our railroads." Service, he said, was the only commodity that any transportation agency had to sell, and when the service of any two agencies was equal, the buyer frequently buys from the one agency because of the "relations which exist between the buyer and the producer. The importance, then, of good public relations, I think, becomes crystal clear." The importance of the freight agent to railroad stability was basic, he continued, for it was he who brought "home the bacon to the iron horse."

The ambassadors of the railroads in the community, was what E. J. Dean, assistant vice-president, traffic of the Erie, called the agents. He further asserted that it was the agent's sales ability that made for railroad survival in the community. He named giving service and sincerity of purpose as the best sales arguments that any railroad man had to offer.

P. M. Shoemaker, operating vice-president of the Delaware, Lackawanna & Western, said that he

thought of loss and damage as a lack of service on the part of the railroad. He asked his audience to consider whether or not they had not been too prone to blame the shipper for much of the loss and damage. While there was no doubt in his mind that the shipper was responsible for some of the losses sustained both by himself and the railroad, it was, in the main, the responsibility of the railroad to halt them. In order to do that, he felt that there must be employee education and that agents must get back to the fundamentals of damage inspecions, proper preparation of exception reports, and the reporting of rough handling of cars. He also asserted that management was serious when it issued instructions that agents refuse freight that was improperly packaged. If agents followed these precepts, exchanged information, and did not fail to "follow up," Mr. Shoemaker felt that the loss and damage picture soon would change.

Recognizing that the agent was a busy man, F. L. Doody, assistant comptroller of the Chicago & North Western, told his audience that mechanized accounting procedures, already a help to the agent, would continue to cut the amount of time he must spend in his accounting work, leaving him more time for contacting his shippers and maintaining closer relations with his station force, which the speaker recognized as perhaps the most important duties of the agent.

Among the reports that the agent must send to the accounting department the speaker urged his listeners to properly and fully prepare interline waybills. He further asked that more attention be paid to the handling and billing of C.O.D. shipments, which are causing the railroads so much trouble. Correct passing reports, prepared by junction stations, were a necessity, he said, since from them was obtained the information that enabled the accounting department to give intermediate carriers their proportion of the freight receipts. Last, but far from least, he urged upon the listeners educational programs for the "help" at the stations.

Attendance Large

From thirty-nine states and five provinces of Canada came the 422 men who were present at the meeting. Discussions were frank and open. Sessions were well attended and keen interest was shown in the entire proceedings. This earnestness led Chairman J. L. Webb, manager stations and motor service, of the Pennsylvania, to call this one of the most successful meetings in the section's history.

Digests of committee reports follow.

COMMITTEE ON STATION OFFICE OPERATION

H. A. FREEMAN (CHAIRMAN)
Agent, Grand Trunk Western
Chicago, Ill.

Since railroads use many blank forms with no railroad heading, one of the subcommittees of this group suggested standard forms for all railroads and made by a number of printing establishments. Thus substantial savings in stationery supplies could be realized.

Two subcommittees felt that more attention should be paid to getting C.O.D. shipments properly marked. Lack of C.O.D. markings frequently make it impossible for the railroad to collect proper charges, and much revenue is lost. Shipping order, bill of lading and freight bill all should have a space for the marking "C.O.D." One group recommended a "C.O.D. Month" in which special attention would be devoted to bringing the C.O.D. matter to the attention of all interested parties.

Also recommended was the adoption of a tally sheet record consolidating a complete record of transaction from the time a car arrives on the house track until it is completely unloaded. This information is invaluable to traffic and operating departments alike. One group also recommended that the l.c.l. check-out or stevedore report be mailed to the loading station, giving them a record of all their merchandise cars.

It was further recommended that tracers by shippers be sent by agents at origin to destination agent, who would in turn send the information to the forwarding agent for communication to the shipper. Much clerical effort would be saved thereby.

COMMITTEE ON LOSS AND DAMAGE

A. E. WARD (CHAIRMAN)
Agent, C., M., St. P. & P.
Chicago, Ill.

In attacking the problem of loss and damage the various subcommittees recommended the consideration of many suggestions. Realizing that poorly marked freight is responsible for many claims one group recommended that Rule 6, Consolidated Freight Classification be revised to emphasize: (1) larger tags with at least ⅜ or ¼ in. letters on all packages; (2) where practicable all markings must be shown on the top side of crate or package; (3) stenciling be used wherever possible; (4) two wire tags with brass eyelet on all shipments of pipe, steel rods, and other rough freight; (5) Section 2 of Item B be revised in that all packages, regardless of weight, will be marked.

Another subcommittee reported that a great deal of damage was occurring in stop-off cars. In the knowledge that many factors entered into this the committee recommended stricter policing by the carriers and that "it be made the duty of the railroad to which the stop charge accrues to break down, brace and place load in condition to move from the stop-off point. Further, that a tariff charge be set up to reimburse the carrier for the necessary expense incurred in performing this service." (When this report came before the assembly it was recommended that stop-off cars be loaded by shippers so that the portion not to be removed would not be disturbed. If the shipped did not do this the railroad should, making a charge on the shipper.)

"Repeater" damage, another important item, should be attacked first at the consignor's assembly line, then in loading, and finally a letter should be dispatched to the destination agent arranging for an inspection and report at that end.

Inspections for concealed damage at common points should be made by a neutral inspector, preferably a Weighing and Inspection Bureau man, was the recommendation of Local Freight Agents' Association of

Erie, Pa. Outstanding merits of this proposal, as stated by the committee, are: (1) greater uniformity between railroads; (2) greater efficiency on the part of the inspector as he gets to know the job; (3) more satisfaction to patrons who will have to deal with only one railroad inspector; (4) placing all roads on an equitable basis, eliminating insinuations that other roads are more lenient or tougher. (This was passed on to the individual carriers for action.)

Since most claims are filed by the consignee and the shipper frequently has no knowledge of the concealed damage to his shipment, the Freight Agents' Association of Dayton, Ohio, suggested that concealed damage reports be prepared in triplicate and forwarded to the agent at origin.

COMMITTEE ON STATION TRAFFIC

G. R. LITTELL (CHAIRMAN)
Terminal Agent, Baltimore & Ohio, Cleveland, Ohio

Over-refinement of classifications, etc., has put the tariffs in a place where they are well within the realm of absurdity, says the Local Freight Agents' Association of Chicago. Thus "rate sharks" derive an income from "the failure or inability of both shippers and carriers to establish from the price list [tariffs], the legal going rate." In this day of streamlining why not avoid some of the "multitudinous hairsplitting of classifications and ratings." The tariffs at present are a "Frankenstein", a monster which defeats the very purpose of its creation.

It was also recommended that simplification of rating l.c.l. shipments be expedited by adopting the Railway Express Agency method. If this is found impractical at least let it be applied to rating shipments of less than 1,000 lb., reducing clerical effort. (Referred to committee of direction for consideration.)

The Canadian National recommended urging the U. S. Department of Commerce to allow export shipments without declarations, because in cases of free, astray or over shipments, generally the exports have been filed but the shipment checks short at destination. This is mainly because the customs work such short hours, etc. and are the only ones who possess the declarations.

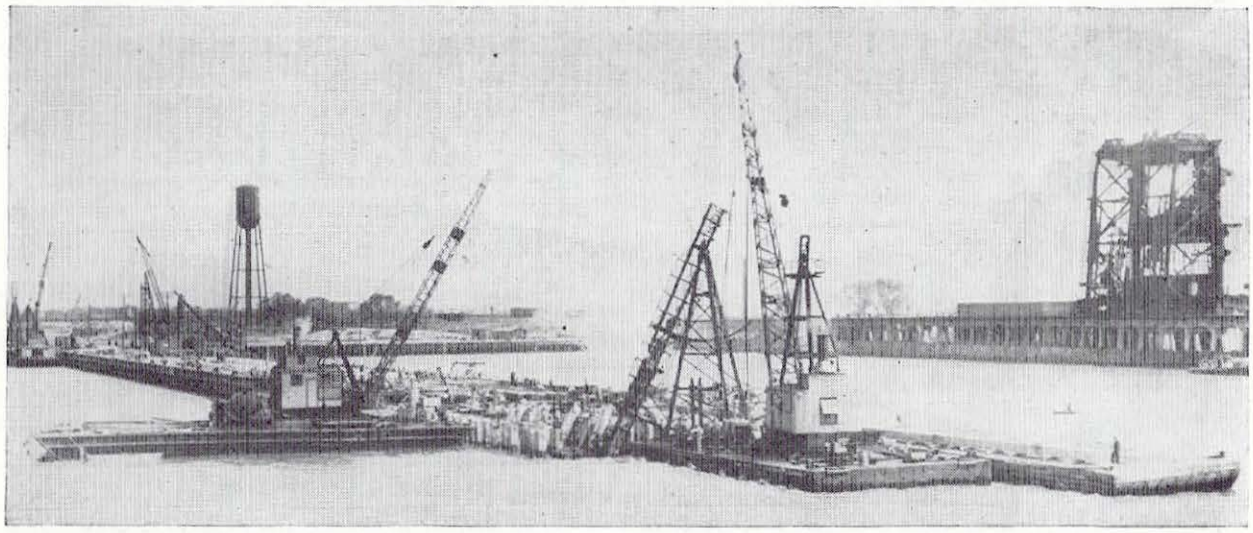
A suggestion also was made that due to the apparent unpopularity with shippers a study be made of the advisability of continuing use of the Commercial Harmonized Bill of Lading forms, and that they be dropped if not widely accepted. (This suggestion was referred to the Committee of Direction and to the Accounting and Traffic Divisions, A.A.R. All agents were urged to try to "sell" the shipper this bill of lading.)

COMMITTEE ON STATION AND TERMINAL OPERATION

G. M. MURRAY (CHAIRMAN)
Erie, Chicago

The talk of mechanization of freight houses was strong. W. P. Radke, the agent at St. Paul of the Chicago, Milwaukee, St. Paul & Pacific recommended mechanization to the fullest possible extent at the earliest possible moment. It was his belief that some type of mechanical equipment is available that can be used to advantage in even the most antiquated freight house. Mechanized equipment, he said, should enable the railroads to handle freight more expeditiously and cheaply. Another speaker urged the use of more "light" mechanized equipment and pallets, as they fitted the needs of each warehouse.

Referred to the committee of direction for consideration was a proposal by the Local Freight Agents' Association of Petersburg-Hopewell, Va., that the practice of showing car number and initials in the proper place on waybills and transfer stamps be resumed and that the practice of showing only block numbers be dropped.



At Newport News, Va., where the Chesapeake & Ohio dumped 19,000,000 tons of coal in 1947, the railway is building a third coal pier of low-level, belt-conveyor design which will increase C. & O.'s annual dumping capacity at the port to approximately 25,000,000 tons a year

LABOR WANTS TIGHTER FEDERAL CONTROL

Resolution of Railway Labor Executives' Association calls upon government to assume "full" responsibility for operation of the railroads; breakdown of new negotiations between management representatives and leaders of hold-out ops

Rallying to the support of the three holdout operating unions, whose May 11 strike threat bought government control of the railroads under Secretary of the Army Royall, the Railway Labor Executives' Association this week adopted a resolution calling upon the government to assume "the full responsibilities of operation." This, as the resolution put it, contemplates that the government, "having designated itself the legal operator of the railroads," should now "take control of the revenues of the railroads as it has already taken control of the employees, and proceed to bargain upon wages and working conditions."

R. L. E. A.'s action followed the breakdown after four days of negotiations between management representatives and leaders of the three holdout unions, which were resumed on May 18 at the suggestion of Dr. John R. Steelman, assistant to President Truman. Meanwhile, the government's proposal that the restraining order which stayed the strike be converted into a permanent injunction was scheduled for hearing on May 28 before Justice T. Alan Goldsborough in the United States District Court for the District of Columbia.

As noted in the *Railway Age* of May 22, page 48, when the resumed negotiations got under way this hearing was postponed from May 19 and the restraining order extended until May 29.

The union leaders involved are Alvanley Johnston, grand chief engineer of the Brotherhood of Locomotive Engineers, D. B. Robertson, president of the Brotherhood of Locomotive Firemen and Enginemen, and A. J. Glover, president of the Switchmen's Union of North America. Management representatives are Daniel P. Loomis, H. A. Enochs, and C. D. Mackay, chairmen, respectively, of the western, eastern, and southern carrier conference committees. The dispute arose out of the refusal of the three union leaders to accept the report of an emergency board (see *Railway Age* of April 3, page 47), which recommended for their members some changes in working rules and the same 15½ cents per hour wage increase accepted by unions representing other employees.

R. L. E. A.'s resolution calling for tighter government control drew a prompt rejoinder from William T. Faricy, president of the Association of American Railroads, who called it "an attempt to divert attention from the fact that the leaders of three railroad unions refuse to accept the recommendations of an impartial board named by President Truman to hear all the facts and recommend a settlement fair and just to railroad employees, employers, and to the public which pays the bills." Mr. Faricy added that railroad managements "stand ready to put into effect the board's recommendations both as to increases in wages and changes in working rules."

The R. L. E. A resolution was made public at a press conference held in Washington, D. C., on the night of May 25, following a meeting of the association earlier the same day. The press conference was attended by R. L. E. A.'s chairman, H. W. Fraser, who is also president of the Order of Railway Conductors; its executive secretary, A. E. Lyon; and the three leaders of the holdout union. Grand Chief Engineer Johnston of the B. of L. E. is not a member of the association, as are Messrs. Robertson and Glover; but Mr. Johnston said, with respect to the resolution, "if I opposed it I would say so." Another union leader who is not a member of R. L. E. A. is A. F. Whitney, president of the Brotherhood of Railroad Trainmen; he was not associated with the resolution in any way.

The resolution was based upon contentions that railroad management has demonstrated its inability to maintain satisfactory labor relations and conditions upon the railroads and has failed to meet the public need for efficient, prompt and full services.

In reviewing the dispute, it averred that the government, by obtaining the restraining order, "forced" the three unions to cancel their strike. Throughout the controversy, it said, the government, although controlling the railroads, has failed to negotiate directly with the brotherhoods and, instead of negotiating, has "assumed an attitude which encourages management to maintain a position in the dispute which the three organizations cannot accept. . . ." It added that the government, has "thrown itself on the side of the railroads and has assumed the role of a strike-breaking agency . . ." by (1) undertaking "purely technical seizure" of the railroads; (2) obtaining restraining orders at court; and (3) failing to conduct appropriate negotiations.

R. L. E. A. further declared that the government has a "duty and obligation" to the employees involved "to see that they are treated fairly and not required to give services for wages below the bounds of equity and justice."

With respect to wages, the resolution argued that an additional 16.1 cents per hour increase over that recommended by the President's emergency board is needed by the employees involved in order to meet the "increased living costs" as of April 15.

The R. L. E. A. also asserted that the various work-

ing rules which the three organizations seek to revise have gone for more than 25 years without uniform improvement. The working conditions, the R. L. E. A. said, involve such "fundamental equities" as (1) loss of time both at starting and final terminals without proper compensation; (2) being tied up for long periods of time at points where adequate eating and sleeping accommodations are lacking; and (3) adjustment of inequalities in rate differentials.

Will Fight Injunction

In response to questions at the press conference, the union leaders asserted that they would "fight" the court proceedings before Justice Goldsborough. Mr. Fraser commented that the unions do not "particularly favor" nationalization of the railroads, but added that "we've got to find some answers to some very definite questions and this looks like one answer." By taking "complete and full" control of the carriers, the labor leaders said, the government could then enter into direct negotiations with the three brotherhoods. "Somebody should bargain with us," they declared.

The leaders also asserted that labor would still have a "right to strike" if the association's proposal is adopted by the government, and in this connection they referred to a strike vote now being taken on the government-owned Canadian railroads. At the same time, Mr. Robertson contended that the dispute could be settled if the government would bargain. He charged, however, that the government has not as yet done anything to bring about a settlement.

The union leaders held that they neither were attempting to "wipe out" the mechanisms of the Railway Labor Act, nor have they given up hope of bargaining with management; but they asserted that "if we have to accept emergency board reports, we might as well have compulsory arbitration." At the same time, they contended that compulsory arbitration would not "necessarily" result from government ownership of the carriers, adding that such a procedure "always has been repugnant to the American people."

Conferees Issue Statements

With the ending of last week's series of the resumed conferences on May 21, both sides reiterated their respective positions in public statements. The statement by the management representatives indicated their continuing insistence upon a settlement in conformity with the report of the emergency board, while the union leaders indicated that they are still demanding concessions beyond those recommended by the board.

The carrier representatives expressed their "regret" that the conferences had been "productive of nothing" looking toward a settlement. Their statement also set out briefly the wage and rules adjustment recommended by the emergency board, meanwhile making this additional comment:

"The negotiations were terminated by the union officials after they had again rejected a settlement proffered by the railroads in conformity with the recommendations of the fact-finding board appointed by President Truman. . . . .

"Aside from the question of proper wages and rules is the question of whether disagreements between railroad employees and railroad management shall be resolved equitably and fairly to all concerned—including the public—in conformity with the spirit and intent of the Railway Labor Act, or whether the strike weapon shall be employed, in disregard of public interest, to impose unwarranted costs upon railroad transportation which ultimately must be reflected in everybody's cost of living.

"The processes of the Railway Labor Act, enacted in 1926 with the support of railway labor include negotiation, mediation, arbitration and, as a final resort, fact-finding by a board appointed by the President of the United States. The law depends upon public opinion, within a 30-day 'cooling-off' period, to enforce due respect for the findings of the Presidential board.

"This provision of the law has been flouted by the railway labor organizations for the past several years. By strike threats and the exercise of political power, they have enforced settlements more favorable to themselves than Presidential boards have found, after extensive hearings, were fair and reasonable.

"Continuance of this situation is intolerable. It imposes costs upon the American public beyond those found by Presidential boards as necessary to assure justice to railroad employees. We believe it is long past time that railroad labor unions assume the responsibilities imposed upon them by the law they helped to enact.

"This is why the railroads believe that the settlement of the demands of the engineers and firemen and the Switchmen's Union should be in conformity with the recommendations of the board appointed by President Truman."

To the labor leaders, this management position looked like one of determination to inject compulsion into Railway Labor Act procedures. The May 21 statement of Messrs. Johnston, Robertson and Glover was as follows:

"We have talked with railroad management for four days without making a particle of progress. At the beginning of the conferences, we were told that the representatives of management meeting with us had authority to bargain. That was the beginning of a series of concessions — every one of them made by labor's side of the table.

"Our organizations presented a number of plans during the meetings. Those plans represented several combinations of downward revisions of our requests. To undertake further scaling downward would amount to giving up all hope of accomplishing a basic correction of the unsatisfactory conditions which required this wage-rules movement.

"Then, at the end of four days of continuous effort on the part of the brotherhoods to advance a basis for settlement, management's reply was : 'You know the emergency board report; take it or leave it.'

"That is not bargaining, and it is obvious that at no time during the four days did management have any intention of bargaining either in spirit or in fact. Instead, management is determined that the voluntary spirit of the Railway Labor Act shall be converted into compulsion. We have no intention of entering into an agreement which subverts that act."

BUYING NEW EQUIPMENT THROUGH CONDITIONAL SALES CONTRACTS

Burlington has purchased $40.5 millions of equipment on this basis since 1937; local banks furnish money

CONDITIONAL sales contracts have grown increasingly in importance as a means of purchasing new rolling stock. Not only does the interest rate on such contracts compare favorably with those obtained through equipment trust financing, but the former arrangement relieves the road of many of the expensive and time-consuming legal and administrative burdens which arise in the creation of an equipment trust. Furthermore, in these days of delayed deliveries of equipment, a railroad, under the equipment trust, often pays interest from the effective date established on the certificates, long before obtaining actual use of the equipment. The simplicity of the conditional sales and subsequent assignment agreement, on the other hand, makes it possible to coordinate the date upon which the road starts paying interest with the actual delivery of the rolling stock.

Conditional sales contracts involving funds loaned by local banks at points on its lines have been made in several instances recently by the Chicago, Burlington & Quincy, which is currently using conditional sales contracts as a means of financing the greater portion of its new locomotives and passenger cars. This road has entered into nine conditional sales contracts since August 1, 1947, representing a total of $10,816,600 financed, covering a portion of the cost of a total of 9 passenger Diesel locomotives (20 units), 8 freight Diesel locomotives (30 units) and 38 passenger-train cars. Interest rates vary from 1⅝ per cent to 1.95 per cent, and all contracts provide for 96 monthly payments.

A significant development in equipment financing is indicated by the action of three local banks on the Texas lines of the system, which, in effect, purchased one freight Diesel locomotive apiece, the amount financed being $370,002 each in two instances and $441,000 in the third. One of the larger contracts made during the period, although assigned to a large Chicago bank, actually represents funds furnished by a large number of participants, many of which are local on-line banks.

The Burlington entered into its first conditional sale contract late in 1937 when it made a lease arrangement with the General Motors Acceptance Corporation for Diesel-electric locomotive units, the authorized amount being $596,000, at an interest rate of 4 per cent. Subsequently, the lease was assigned by the builder to a large bank in Chicago and the interest rate reduced. From this start, the Burlington financed a total of $40,508,172 through 24 conditional sales contracts, from December 24, 1937, to October 15, 1947, inclusive.

Purchase of equipment through the conditional sale agreement is a relatively simple mechanism, as has been pointed out. The buying railroad enters into an agreement with the manufacturer of the cars or locomotive that it will hand over a stipulated down-payment and will pay the rest of the current agreed sale price in equal installments—monthly, quarterly, or semi-annually—over a stated period. At the same time —or later—the manufacturer (unless he puts up the money himself) enters into an agreement in which he assigns the financing of the sale to a bank or other loaning agency.

As the equipment is delivered the bank turns over to the manufacturer the amount still owned by the road, and thereafter collects all interest and amortization owned by the latter, except that the manufacturer gets any excess in delivered sale price over the price stated in the contract. Also, the manufacturer keeps his original liability with respect to the condition of the equipment delivered to the railroad. This transaction is represented physically by a plate attached to the car or locomotive reading (to illustrate): "Central City Trust & Savings Co., Owner by Assignment from Superior Stuff Locomotive Company, Manufacturer and Prior Owner." As is the case with equipment trust financing, when the railroad pays up, the plate comes off.

STEEL PLANT UTILIZES RADIO

(*Continued from page* 31)

each locomotive without hindrance to the engineer or fireman. Also, with the apparatus in the cab, changing unit parts, testing and general inspection of the equipment can be done more quickly. The transmitter-receiver is on a common shock-mounted frame, and either the transmitter or receiver can be replaced independently of the other.

Directly behind the engineman on the rear wall of the cab is mounted the small mobile control unit, which includes a transmitter-receiver volume control, transmission and receiving indication lights, and "call-tone" push-button. The push-button provides a "tone" signal which can be coded and used for call purposes, rather than speech, from the fixed station to mobile unit, or vice versa. The push-to-talk handset hangs directly below the control unit.

Near the center of the cab, suspended from the

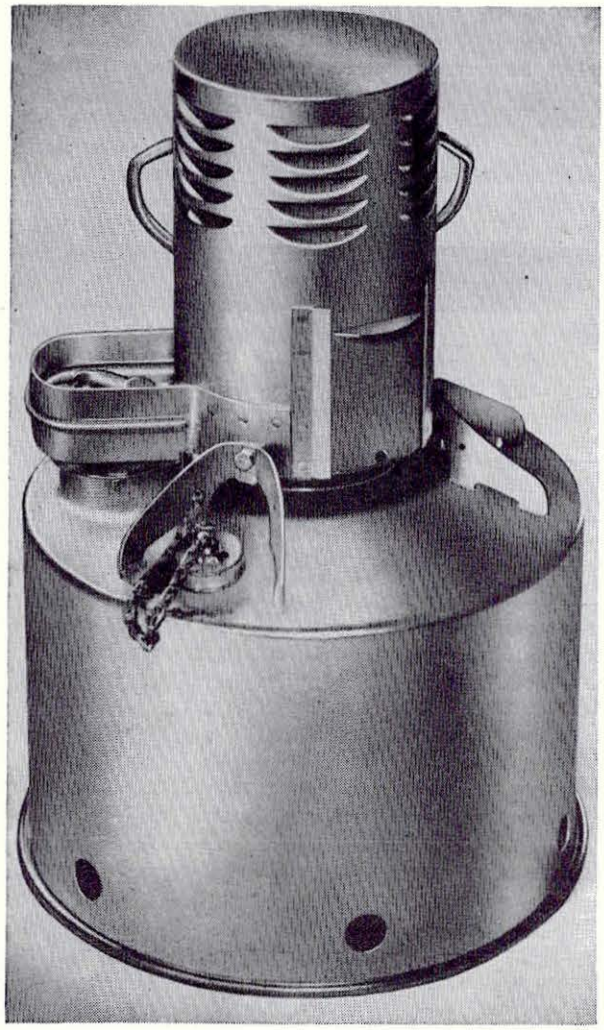
ceiling, is the speaker. Incoming messages or calls are heard by both the engineman and fireman. When the handset is removed from its wall bracket to commence conversation, both the phone and speaker carry the conversation, thereby permitting all occupants of the cab to know what is taking place. At the same time, men on the other locomotives are listening to the conversations. This leads to general understanding by all persons involved, regardless of their location, and not only eliminates possibilities of "cutting in" on speech or unnecessary use of air time, but also permits the yardmaster to issue general orders to all engineers at once.

The radio equipment was designed and manufactured by the Westinghouse Electric Corporation. The equipment is the Type-MR, frequency modulated (FM) railroad radio, and is a duplication of that designed for application on long-distance freight runs. It is designed to meet Federal Communications Commission requirements and many recommendations of the Association of American Railroads.

The maintenance so far required on the equipment at Weirton has been nil. Since September 17, 1947, it has been in use constantly. Of a total of 156 vacuum tubes, 87 per cent of which are in mobile units, only one has failed. A noteworthy fact is that no "dead spots" have been encountered within any building or back of any rising terrain.

REFRIGERATOR CAR HEATER

An automatic heater to protect winter shipments of perishable goods in refrigerator cars, which combines safety and efficiency with unattended operation for more than two days at a single filling, has been introduced by Preco, Inc., 960 East Sixty-first street, Los Angeles 1, Cal.



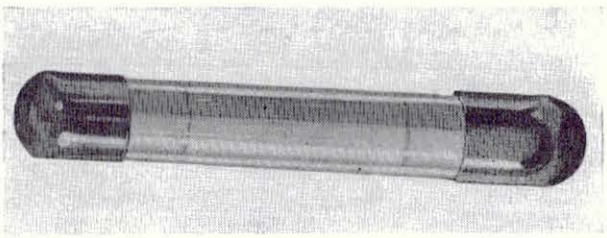
Preco automatic refrigerator car heater

The Preco automatic heater, using methanol, has a burning rate of 6,000 B.t.u. per hr. and is equipped with a rugged, built-in thermostat which is adjustable for any temperature from 30 deg. to 60 deg. F. Fuel capacity is 5¼ gal.

Among its safety features is the heater's explosion-proof design with the flame located above the fuel level. A fiberglass wick raises fuel to the burner and in turn acts as a safety valve. The heater is built with a wide base and low center of gravity to prevent upsetting and all surfaces of the tank are smooth and slope away from the flame area for additional protection. The heater is constructed throughout of heavy-gage steel and is completely protected against corrosion. It is simple in construction and operation, consisting of only four interchangeable assemblies: the tank, thermostat, wick and chimney units. It is 15¾ in. in diameter, 23½ in. high, and weighs 35 lb. empty and 70 lb. when full. The tank bottom is recessed to permit easy stacking.

TEMPERATURE INDICATOR

A development in temperature indicators that shows the temperature by color is manufactured by the Kolor Therm Indicator Corporation, 434 Broadway, New York 13. Known as the Kolor-Therm, the device may be used on electrical appliances, single-phase motors, chemical apparatus, railway journal boxes, and in other mechanical applications.



The Kolor-Therm indicates temperature by color

The Kolor-Therm is yellow at 100 deg. F., or less, and turns gradually from orange to red as the temperature increases. By comparing with color standards, the approximate operating temperature or danger point can be seen, the latter being indicated by a full red. Upon cooling, Kolor-Therm again becomes yellow.

Kolor-Therm is made in two models, one suitable for a maximum temperature up to 190 deg. F. and the other up to 250 deg. F.

NEW WEED SPRAYER

Fairmont Railway Motors, Inc., Fairmont, Minn., has developed a new self-propelled unit for the application of liquid weed killers to railway roadbeds. It is designated as the W66 Series A and is suitable for use with any free-flowing liquid weed-killing agent having little or no corrosive action on common metals.

The unit has a coil spring suspension with direct-acting, railroad-type hydraulic shock absorbers. All steps and walks are of heavy expanded metal to give safe footing. The cab is fully enclosed with rubber-mounted safety glass windows, and has floor and wall ventilators, and one door on each side. It also has windshield wipers, two headlights, two twin air horns, and red, green and white marker lights at each end.

The propelling engine is a six-cylinder, four-cycle gasoline type of 112 hp. at 2,500 r.p.m. A hydraulic coupling is located between the engine and standard clutch, and the unit has a four-speed transmission and needle-bearing propeller shaft. An enclosed reverse gear on the drive axle permits the four transmission speeds to be used in driving in either direction. The engine will drive the unit at a deadheading speed of 40 m.p.h.

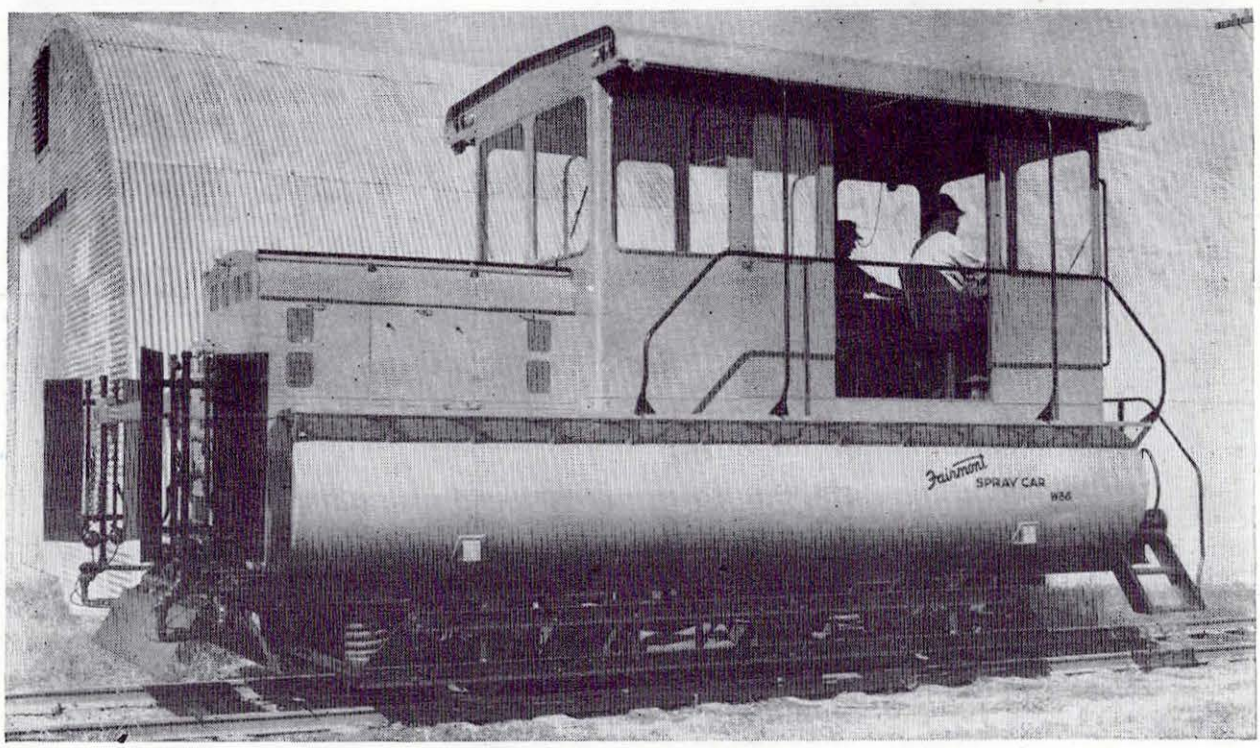
Air brakes are of the clasp type operating on machined drums outside the wheels, and have one power cylinder for each axle. This brake system also includes an emergency air tank and automatic valve to set the brakes in the event of an airline failure.

A four-cylinder engine in the rear enclosure drives gear-type loading and pressure pumps through a clutch, reduction gear and V-belts. It is controlled from inside the cab.

Two automatic reels carry two 50-ft. extension hoses for reaching weed patches along the right-of-way and around the ends of trestles. Pump intake lines have two sumps and two strainers, and are so arranged that air pressure can be used to blow out the strainers.

The machine is equipped with two sizes of spray nozzles arranged in tandem, with five pairs in the center section and three pairs in each wing. Air-actuated valves operated from the cab are used to control the flow of liquid to the different nozzle groups.

The quantity of liquid sprayed is dependent upon the track speed, and the pressure and nozzles used. At 16.8 m.p.h. and a pressure of 100 lb., and using both sets of nozzles, the quantity sprayed per mile is 100 gal. By changing speed, nozzles and pressure it is reported that almost any rate of application can be obtained. The capacity of the chemical tank is 2,600 gal., and, where conditions require a greater capacity, a trailer unit is available which holds an additional 3,000 gal.



The Fairmont Model W66 Series A weed spray car

GENERAL NEWS

Gass Replaces Kendall as C. S. D. Chairman

Latter is given leave of absence; Gass to assume new duties June 1

Warren C. Kendall, who has been in ill health, has been granted leave of absence as chairman of the Service Division of the Association of American Railroads, and Arthur H. Gass, vice chairman, has been appointed chairman. Mr. Gass, who will assume his new post on June 1, has also been serving as director of the Office of Defense Transportation's Railway Transport Department.

In railroad service for more than 50 years, Mr. Kendall started his career as a telegraph operator on the Boston & Maine in 1898. He subsequently served on the B. & M. in such capacities as clerk, chief clerk, assistant general manager, general superintendent, superintendent of car service and superintendent of transportation. In 1917, Mr. Kendall was called to Washington, D. C., to act as a member of the Commission on Car Service of the American Railway Association, now the A.A.R., and from 1918 to 1920, was manager of the Car Service Section of the United States Railroad Administration.

Arthur H. Gass

Mr. Kendall became chairman of the Commission on Car Service of the A.R.A. in 1920, and from 1921 to 1933 was manager of the Railroad Relations Section of the Car Service Division of the A.R.A. He was named chairman of the A.A.R.'s C.S.D. in 1933.

During World War II, Mr. Kendall, as chairman of the C.S.D., and later as agent for the Interstate Commerce Commission, was in general charge of the distribution of the nation's railroad freight car supply, a responsibility which he also exercised during World War I. He also acted as agent for the O.D.T., directing the distribution of railroad passenger cars needed for military movements. For his World War II service, Mr. Kendall was awarded the Presidential Certificate of Merit and the United States Navy Certificate of Appreciation.

Born on May 22, 1877, in Pompanoosuc, Vt., (later renamed Kendall in honor of his family), Mr. Kendall was educated at St. Johnsbury Academy and Dartmouth College. He entered railroad service after receiving a bachelor of science degree from Dartmouth.

Mr. Gass was born in Rolfe, Pa., and was educated at Columbia University. He started his railroad career in 1911 with the Chesterfield & Lancaster, and remained with that road until 1913. During World War I, he served with the American Expeditionary Forces in Company B, 23rd Engineers, Headquarters Detachment, Director General of Transportation.

Mr. Gass has been with the C. S. D. since 1919 and at different times was district manager at Boston, Mass., Detroit, Mich., and St. Louis, Mo. He was named assistant to Mr. Kendall in April, 1940, and from May to July, 1940, was on loan to the French government supervising export traffic.

Mr. Gass served as manager of the A.A.R. Military Transportation Section from August, 1940, to July, 1945. In this capacity, he acted as liaison with the Army, Navy and other branches of the military service, handling all matters pertaining to the transportation of men and materiel for the armed forces. In recognition of this work, he was awarded the Presidential Certificate of Merit, the Army's Award of Merit, the Navy's Certificate of Appreciation and a special commendation from the Marine Corps.

Mr. Gass became vice-chairman of the C. S. D. in July, 1945, and since March, 1946, has been on loan to the government from the A.A.R. as director of the O.D.T.'s Railway Transport Department.

The announcement of Mr. Kendall's leave of absence was accompanied by the following tribute by William T. Faricy, president of the A.A.R.:

"Warren C. Kendall, Chairman of the Car Service Division of the Association, is being given leave of absence, effective June 1, and extending until further order of the president or the board of directors. Mr. Kendall has served the association and the railroads for more than 51 years loyally and with distinction to himself and the high office which he has occupied.

"In his service with the Car Service Division since its inception in 1917, Mr. Kendall has at all times shown a high regard for the interest and well-being of the entire railroad industry. Railroad officers and employees join in the hope that with an adequate rest Mr. Kendall will be restored to good health."

Warren C. Kendall

The O.D.T., meanwhile, has announced the appointment of C. R. Megee, vice-chairman-freight of the A.A.R.'s C.S.D., as the successor to Mr. Gass. Mr. Megee, who also is being "loaned" to the O.D.T. by the A.A.R., joined the latter in 1923 after serving 18 years in various capacities with the Pennsylvania. Prior to being named vice-chairman-freight in July, 1945, Mr. Megee served successively as a car service agent, district manager at Detroit, Mich., and Pittsburgh, Pa., assistant to the chairman and manager of the open car section.

Colonel J. Monroe Johnson, director of the O.D.T., also issued a statement in which he congratulated Mr. Gass upon his promotion and lauded him for his performance while a member of the government agency. In the latter connection, Colonel Johnson recalled that Mr. Gass served the nation during the "most turbulent period" in railroad transportation. "The transition from a war to a peacetime economy has been difficult for the railroads and without the understanding and know how which

Mr. Gass has supplied in this critical period the situation would have been infinitely more difficult." "I would only consent to your going," he told Mr. Gass, "on the assurance that Mr. Megee continue the work where you left off."

Sees Freight Loadings Now Ascending Grade

Kendall report calls gondola shortage the No. 1 supply problem

While this year's freight car loadings remain below the 1947 level, the figures for recent weeks indicate that the trend "is now apparently upward," according to the latest monthly review of the "National Transportation Situation" which has been issued by Chairman Warren C. Kendall of the Car Service Division, Association of American Railroads. The review identified the tight gondola situation as the continuing "Number 1 car supply problem." It also reported that current coal loadings are approaching "all-time record levels," refrigerator car loadings "continue heavy in all sections," and the winter wheat crop "will probably be the third largest in U.S. history."

Scarcity in All Sections

With respect to gondolas, it was stated that all large roads are reporting shortages. "This," the review added, "is particularly true in the Eastern-Allegheny territory where the car situation is critically short due to present very heavy requirements for the movement of iron ore, iron and steel products, and also a record tonnage of import ore arriving at North Atlantic ports. Railroads in the South and Southwest are also severely short of gondolas for the transportation of coal, sand and gravel, and other commodities requiring this type of equipment."

To alleviate this situation, C.S.D. has issued a special order requiring western roads to send Eastern-Allegheny ownership gondolas home loaded or empty, with the qualification that roads operating west of the Continental Divide may load the cars to destinations east of Montana, Wyoming, Colorado, and New Mexico, thus obviating the necessity of moving these cars empty over the Rocky mountains. "It is essential that gondolas be handled with the highest degree of efficiency," Mr. Kendall said.

With respect to hopper cars, he foresaw heavy demands ahead in view of the "record levels" of coal production since the end of the miners' strike, and the fact that this season's lake-ore movement got off to "a good start—a week earlier than in 1947." In the latter connection, Mr. Kendall said the movement in recent weeks through the Lake Erie ports to inland furnaces "has seriously taxed the car supply."

Meanwhile, as the statement put it, "there has been no relaxation in covered-hopper demands," the loadings of such cars continuing "substantially" above the 1947 loadings. There are "over 4,000" covered hoppers on order, and "they will doubtless be absorbed in active service as fast as delivered by the car builders," Mr. Kendall also said. As to flat cars, he noted that "demands continue heavy, especially in the Mid-west, for cars for agricultural implements and machinery." Moreover, there has been "a resumption of normal flat car loadings from the Pacific Northwest following settlement of labor difficulties in the lumber industry."

Box Car Situation Better

The box car supply, which had been "relatively easy" from the first of the year, has "tightened considerably in the past few weeks and shortages, particularly of the better grade cars, are being reported in practically every section of the country," the C.S.D. chairman reported. He went on to predict that the "strain will be greater as the season's heavy loading period moves toward its peak"; but the principal current box-car problem is that of building up the supply on grain-originating roads to enable them to handle the winter grain crop which is coming in at a time when "a considerable amount of old grain remains to be cleared off the farms."

Noting how C.S.D. has issued orders requiring the return of western-owned box cars to their home roads, Mr. Kendall said that this action, and the cooperation of eastern roads, resulted in the western lines "having a somewhat better supply of box cars on May 1 this year than they had on the same date in 1947." The increase in western-owned plain box cars on home roads amounted to 40,796 cars, 94.1 per cent more than the May 1, 1947, total.

Meanwhile, loadings of watermelons in the southeast "have been running much heavier than anticipated for this time of the season and the available supply of ventilated box cars is being pressed into service rapidly," but the movement "will be handled without delay." In the latter connection, however, Mr. Kendall said that some single-deck stock cars were being used for watermelon shipments, there being "no shortage of stock cars to handle the spring livestock movement."

The supply of automobile cars, as the report put it, "remains adequate and all requirements for such cars are being protected currently." The heavy refrigerator car loadings mentioned above came after the lifting of embargoes placed by railroads against perishable shipments in the face of the May 11 strike threat. Mr. Kendall expected the resultant tight reefer situation to continue for 60 days. He also noted that 9,325 reefers were placed in service during the 12 months ended April 30; and that 9,000 such cars are now on order.

Production Disappoints

Reviewing equipment-production reports for April, Mr. Kendall called that month's deliveries of 9,052 cars "disappointing," because it fell behind the production of March and December, 1947, the high months of the period during which attainment of the 10,000-car monthly output has been sought. In this connection, the C.S.D. chairman also referred to the recent announcement wherein the Office of Defense Transportation and the Department of Commerce's Office of Industry Cooperation stated that 750,000 tons of steel had been allocated for the car program during this year's third quarter. "Apparently," Mr. Kendall added, "this indicates that if the 10,000 goal is not reached before July we may anticipate that production thereafter will be at the desired rate."

Nevertheless he called April's net gain in car supply a "good increase." In that month, 6,677 cars were retired, while the Class I roads and railroad-owned refrigerator car lines installed 8,934 new cars. Thus the net gain was 2,267 cars, which included gains of 2,509 hopper cars and 1,012 box cars, "with miscellaneous small offsetting losses in other types of cars." Mr. Kendall noted that this marked the sixth consecutive monthly gain, the total net gain for the six months having been 16,826 cars.

Railroads Press Fight for Insurance Tax Cut

Carriers appeal to Senate group to put levy on graduated basis

Seven bills, each of which is designed to amend either the Railroad Retirement Act or the Railroad Unemployment Insurance Act, were the subject of a three-day hearing May 19-21 before a subcommittee of the Senate committee on labor and public welfare. Although each of the seven measures was discussed generally, special emphasis was placed upon three of the bills—S.994, sponsored by Senator Hawkes, Republican of New Jersey, and S.2437 and S.2438, introduced by Senator Aiken, Republican of Vermont, for himself and Senators Morse of Oregon and Ives of New York, Republicans, and Thomas of Utah, Hill of Alabama, Murray of Montana and Pepper of Florida, Democrats.

The latter two measures, which would increase Retirement Act benefits by 20 per cent and Unemployment Act benefits by 25 per cent, are identical to bills which have been introduced in the House by Representative Crosser, Democrat of Ohio. Other like bills have recently been introduced in the

House by Representative Tollefson, Republican of Washington, because, according to the sponsor, the question of increasing railroad retirement and unemployment insurance benefits is "a matter of vital importance to both parties" and "a matter that transcends party politics."

The Railroads' Views

As reported in *Railway Age* of April 5, 1947, S.994, would, among other things, amend the Unemployment Act by placing the taxes collected thereunder on a sliding scale basis which would immediately reduce the levy (paid entirely by the railroads) from 3 per cent to ½ per cent of the taxable payroll so long as the balance in the Railroad Unemployment Insurance Account in the Treasury remains above $350,000,000. Hearings on a similar proposal, H.R.5711, sponsored by Representative Simpson, Republican of Pennsylvania, were completed earlier this year before the House committee on ways and means, as noted in *Railway Age* of March 27, page 59.

The railroads' views before the subcommittee were summarized by Dr. J. H. Parmelee, vice-president of the Association of American Railroads and director of its Bureau of Railway Economics, and J. M. Souby, general solicitor of the A.A.R. According to Dr. Parmelee, benefits payable under the Unemployment Act are equal to or better than the most liberal of the state laws applying to non-railroad workers and are "more liberal" than the average of such laws. At the same time, he observed that railroad employees also receive sickness and accident benefits of a sort which no other workers receive, irrespective of any connection with their employment, and wholly at the expense of the carriers. He also noted that, at the end of 1946, the average retirement benefit paid under the Social Security Act was $23.90 per month, as compared to $68.37 payable under the Retirement Act.

Reserve Is Excessive

"It was less than two years ago," the A.A.R. officer continued in part, "that the already high preferential benefits enjoyed by railroad workers were further liberalized. Yet these bills propose to increase these preferential benefits without reference to the 25 per cent of all workers who now receive no social security protection and the needs of the still larger group who now receive lesser benefits under general social security legislation."

Confining his remarks principally to S.994, Mr. Souby reminded the Senate group that the railroads are taxed 5¾ per cent on pay rolls for retirement benefits, as compared to 1 per cent for other employers, and are taxed a flat 3 per cent for unemployment benefits, as compared to an average of less than 2 per cent for other employers.

In urging that the unemployment insurance tax on the railroads be placed on a graduated scale, Mr. Souby said that "the present excessive tax upon the railroads has, in a period of less than nine years, resulted in the accumulation of an unemployment reserve fund of more than $900,000,000." "The fund," he added, "is already so hugely swollen that it has lost all relationship to any conceivable need. But the railroads are still being taxed at the rate of about $145,000,000 a year further to build up this reserve fund which is many times as great as necessary fully to protect all benefit payments."

The Senate group also received testimony from members of the Railroad Retirement Board. A majority of the board, composed of Chairman W. J. Kennedy, the "public" member, and J. G. Luhrsen, the labor member, is against the enactment of S.994 and in favor of S.2437 and S.2438, a stand similar to that taken by the railroad labor organizations. Minority views were expressed by F. C. Squire, the railroad member, who said that the present unemployment insurance tax rate of 3 per cent is "simply gross overcharging." "The fund is now about $950,000,000, far beyond what is needed for the worst depression, according to any forecasts we can make," he added. "Our income is now about $150,000,000 per year in taxes plus about $18,000,000 of interest, a total of about $168,000,000. Against that, our disbursements for unemployment and sickness benefits are about $65,000,000, leaving over $100,000,000 a year excess going to increase the already too large fund. In fact, the fund is so large that the tax could be eliminated entirely and we could pay benefits for 10 or 15 years."

With respect to S.2438, Mr. Squire observed that the average total unemployment benefits paid, per beneficiary, since the beginning of the Unemployment Act have increased from $94 in 1940 to $226 in 1947. In his discussion of S.2437, he held that enactment of that bill would mean $30,000,000 per year added burden on all future retirement-tax payers in order to pay additional benefits now to beneficiaries "by whom and for whom no taxes, or insufficient taxes, have been paid to take care of the additional benefits proposed in this bill." The unfunded accrued liability under the Retirement Act now amounts to about $6,600,000,000, he said, adding that over $1,000,000,000 more would be added to that liability the moment S.2437 became effective.

Board Foresees "Improvements"

The R.R.B. majority opposed the sliding-scale plan of unemployment taxes "because it believes that sickness benefits should be retained and because it believes that, while the present 3 per cent tax rate may be more than adequate for both sickness and unemployment benefits, that rate should be maintained for emergencies and possible further improvements in the benefit structure." Enactment of S.994, the majority held, would be "a serious backward step in the development of railroad social insurance—a step for which there is no justification in view of the needs of railroad employees or the condition of the railroad industry."

The contentions of the Railway Labor Executives' Association were offered by L. P. Schoene, counsel for that organization. Mr. Schoene advised the subcommittee that the R.L.E.A. is "unanimously and unequivocally opposed" to the enactment of any of the bills under consideration except S.2437 and S.2438. "Each of the other bills . . . would, apart from anything else that might be said for or against them, increase costs far beyond those that can reasonably be foreseen to be met by the present tax schedules," he said in part. "Under present conditions, the employees are having a hard enough time making ends meet without having the deductions from their pay further increased."

In addition to S.994, S.2437 and S.2438, other bills which the subcommittee had under consideration were

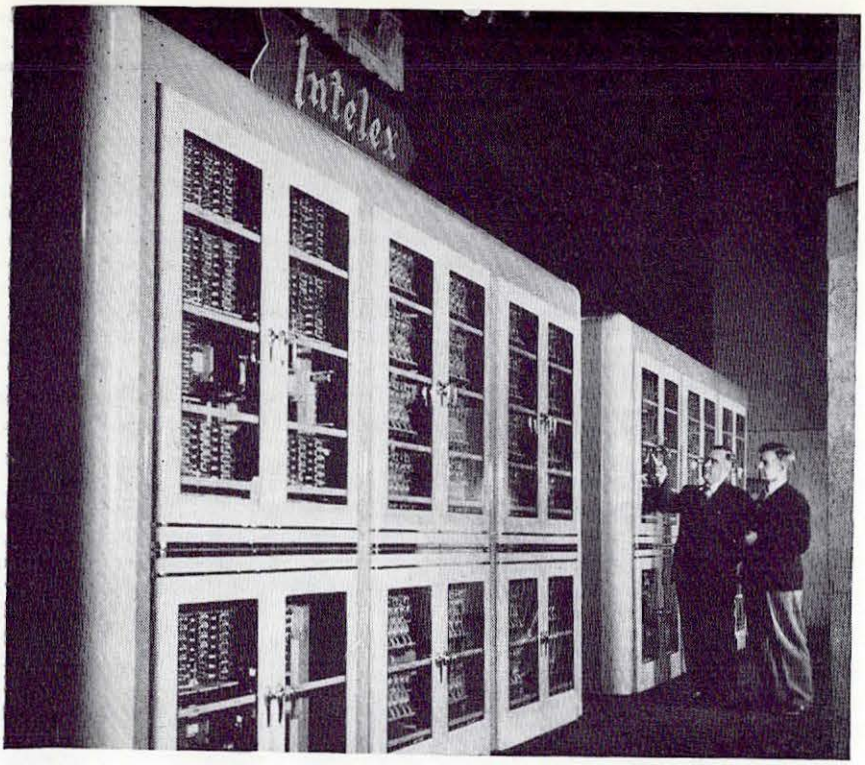
(*Continued on page 70*)

Automatic Central Reservation System Shown by I. T. & T.

A new automatic reservations system that can handle requests for space in seconds, with the precision of mechanical and electrical apparatus, received its first public demonstration recently at headquarters of the International Telephone & Telegraph Corp. in New York. Representatives of air lines and railroads were present.

The new robot—called Intelex—may be compared to a modern dial telephone switching system, except that it is geared specifically to handle the more complex problem of reservations. A teletype message from any point, coast to coast, that is connected to the Intelex system will automatically actuate the "mechanical brain" to send back an immediate answer by teleprinter to practically any reservations query. Thus, any regular reservation operation can be handled in a matter of seconds and with fewer people than under present methods. For customers, this may mean less irritation and less time spent at reservation desks or on the telephone in search of reservations. Equally important, the manufacturers assert, is the prospect that transportation lines will be able to effect substantial savings through the reduction of the manual operations which characterize present systems. The number of trains or days in advance that can be handled is determined by the size of the installation.

To help spectators visualize how the system operates, I. T. & T. engineers had arranged a typical reservations setup. Booths represented a city sales office, a district reservations office, an airport or station ticket office and a central reservations exchange housing the Intelex equipment. The requests handled by the equipment ranged from simple oneway trips to the more complicated variety calling for round-trips



Reservation requests go into this apparatus, which automatically assigns space or suggests alternative accommodations

and reservations on several portions of the same or different runs. In actual practice, the mechanical equipment would be located in a central reservations exchange near the traffic center of the system.

A typical reservation is handled under the Intelex system in the following manner: A customer telephoning to a ticket office is connected with a clerk who finds what destination, date, hour and accommodations are wanted. The clerk enters the information, together with his own identification, upon a reservation card and sends a message in simple code over the teleprinter circuit to Intelex at the central exchange. Once the query has reached Intelex, the computation and subsequent reply are completely automatic—including the operation of the transmitter which sends the answer back to the receiving teleprinter in the originating sales office.

The ability of the Intelex apparatus to translate a request for a reservation into a definite answer is the key to the entire operation. If the space asked for is available, the machine advances its storage record for the number of seats or rooms requested and answers by repeating the message and adding a serial number. This serial number indicates that the space requested has been confirmed. It also provides a means of reference should the need for future inquiry arise. In a request of this type, confirmation can be obtained in less than 20 seconds.

If the space is not available, the machine selects the next available space, informs the clerk of the alternative, but does not record the space as sold until the clerk indicates the desire for confirmation in a subsequent message. During the few seconds required for the request, search and confirmation, the clerk is able to obtain the name, address and telephone number of the customer and learn whether or not he desires return accommodations. By the time this information is recorded, the confirmation is received. The clerk then tells the customer that he has his reservation and arranges for delivery of the ticket. As he does so, he notes on the reservation card the serial number of the message received from Intelex and any other pertinent information. He then files the card and is ready for the next call.

The apparatus, however, can do more than process a simple request. If a nonexistent train or car is specified, the request automatically goes to a special operator, who will contact the clerk and put him right. Another interesting feature of the system enables any person within the system to learn the accommodations sold or available at any time. With this information, problems arising from missed connections or group-travel demands are greatly minimized. Provision also is made for a circuit to warn all stations periodically and automatically that certain trains have been sold out, or are rapidly approaching that condition. So, too, when cancellations occur for trips previously sold out, it is only a matter of seconds until the information is conveyed automatically to all or selected stations as desired. In busy offices, this information can be posted for all clerks to observe by means of a space-availability board. The special operator at the central office can also use the broadcast circuit to send messages to any or all stations at any time.

Cancelling space under the Intelex system follows a similar procedure except that the machine steps down its storage record as many places as there have been cancellations. The designers of the new system are said to have employed only standard components which have been tested by use in other applications, especially the automatic telephone. Relays have double contacts so that failure in any one contact will not disrupt operation of the machine. Power supplies also have been doubled. Faulty components can be replaced easily. If, in spite of these precautions, power failure should halt operations, the machine is so constructed that all markers will remain in the last position and the stored information is kept intact. Further, monitor printers record all transactions, thereby providing a printed record which may be examined manually, if necessary.

Aydelott Reports Progress In Theft-Loss Reduction

Although the total loss sustained by the railroads in 1947 because of theft reached the highest mark in 24 years, genuine progress has been shown in the reduction of such losses at the end of the recent war as compared with the tremendous loss after the first world war, James H. Aydelott, vice-president, Operations and Maintenance Department, Association of American Railroads, said in Atlantic City, N. J., on May 24, in an address before the 28th annual meeting of the A.A.R.'s Protective Section. "Losses attributed directly to theft in 1920 . . . reached the colossal sum of $12,000,000," he added. "Theft losses in 1947 were estimated at $3,400,000. Thus, losses due to theft were slightly less than one-third as much in 1947 as they were in the peak year of 1920."

"I might point out," Mr. Aydelott continued, "that the losses last year are even further modified by the fact that freight ton-miles in 1947 were considerably greater than in 1920 and claims paid in 1947 were approximately 75 per cent greater than they would have been had the average price level for the 10 years preceding 1942 prevailed. This commendable record, which was achieved with about 6,000 fewer men than were engaged in railroad police work in 1920, is due to such factors as closer coordination of operations, the exchange of ideas and experience through the Protective Section, more rigid examination and observation of new applicants, higher wages attracting better men, more effective preliminary training and closer observation of new patrolmen and the growth of carefully

planned courses for in-service training designed to keep all police and special agents in close touch with the latest developments in their fields."

In view of present world conditions, he told his audience, the railroads would not be remiss in re-examining and remembering the lessons their protection forces learned during the war. "The entire railroad industry is well aware of the outstanding job you did not only in protecting passengers and vital freight, but also in so effectively guarding track and equipment that not one case of successful sabotage was reported. Each year the job you are called upon to do becomes more difficult. Some of the contributing factors are the increasing ton-miles, the increase in value of shipments, the vast distances over which much freight must be hauled, several transfers of freight along one or more lines and the perpetual conspiracies of criminals who exert every energy in keeping a few steps ahead of you. . . . You and your staff members must serve a dual role. You must not only be railroad men, but policemen as well, and you should be proficient in both. Members of the railroad protective forces must know federal statutes and the laws of municipalities and states, as well as the principles of railroading and law enforcement."

The degree to which railroad police agencies have perfected their ability to apprehend the criminal, Mr. Aydelott concluded, is shown by the 5,306 arrests reported to the Protective Section last March by 89 railroads. Convictions were obtained in about 98.7 per cent of the cases tried. The fact that convictions regularly follow about 98 per cent of arrests, or better, is the best possible evidence that good judgment is exercised by railroad police in making sure there are adequate legal grounds for taking offenders into custody.

The report of the committee on law enforcement, the chairman of which is J. D. Roosa, superintendent, property protection, New York Central System, said that thefts of baggage, especially thefts from baggage, are still a problem, although the general trend is downward, in many areas to a marked extent. It was noted in the report that cases of robbery, including the armed holdup of employees and passengers, were approximately 72 per cent higher, according to information received by the committee, in the period June, 1947, through March, 1948, than in the comparable period one year ago.

W. G. Fetzner, chairman of the committee on regional police committees and chief special agent of the Chicago, Burlington & Quincy, said in his report that the regional committees were permitted to become dormant during the war and as a result "there has possibly been some lack in recognition of the importance of holding [such meetings] as originally intended." Assurance was given that the present program of activities, and the plans for the future, will produce the results necessary to accomplish the purposes for which regional meetings were originally instituted.

The report of the committee on railway police training, submitted by its chairman, H. L. Denton, general superintendent of police of the Baltimore & Ohio, said that 4,807 copies of the detailed program outlining a basis for "Instructions for the Guidance of Railway Police," which was presented at the 1947 annual meeting of the section, have so far been ordered by 45 member railroads. For those roads desiring to inaugurate a brief and intensive educational course along the lines laid down in last year's report, the committee has prepared a condensed outline of the training program, a copy of which has been sent to all member roads.

Unless the railroad police departments increase their vigilance it can be expected that the number of trespassers will continue to increase, according to the report of the committee on trespassing, the chairman of which is W. J. Melvin, chief special agent of the Chesapeake & Ohio. It was suggested that police department supervisors impress upon their forces the acuteness of the trespassing problem. To combat the problem of juvenile trespassing, which is much on the increase, the report recommended that railroad police departments cooperate closely with railroad safety departments and that they contact school principals and juvenile authorities, soliciting their help toward keeping youngsters off railroad property. It also was suggested that the subject would be pertinent for discussion at the semi-annual meeting of regional police committees.

Senator Reed Pleased with Supply Of Box Cars for Wheat Movement

Senator Reed, Republican of Kansas, has announced that he has been advised by R. E. Clark, manager of the Closed Car Section, Car Service Division, Association of the American Railroads, that "very satisfactory conditions" prevail with respect to the available box car supply for the movement next month of the southwest winter wheat crop. Senator Reed was the chairman of a subcommittee of the Senate committee on interstate and foreign commerce which last year conducted an extensive investigation into the freight car situation.

Senator Reed said he has been informed that, as of May 1, the principal wheat loading carriers in the southwest had available 11,219 more box cars than were on hand at the same time in 1947. As of May 18, he added, 5,509 empty box cars were in storage at country stations.

The Kansas legislator also lauded the results of the program launched early this year by the C.S.D. to return cars to their home roads, and in this respect reported that the present percentage of western cars on owning roads is the highest since July, 1944. "The western railroads have always claimed to have a better class of box car than applies throughout the country generally, even if railroads in the other section do not agree," he commented. "The early return of . . . western owned cars to their home roads will enable them to place them in their repair shops and condition them for the bulk grain movement."

Young Denounces Railroad Heads, Bankers, I.C.C. and A.A.R.

"The railroads have been able to abjure progress because basically they . . . enjoy a monopoly of heavy transportation, and because the railroad executives have not yet come out of the blue smoke haze of the Morgan library," Robert R. Young, chairman of the Chesapeake & Ohio, declared at a joint luncheon meeting of the Executive and Rotary clubs in Chicago on May 25. "When I came into C.&O.," Mr. Young stated, "not one employee was engaged in basic research, and this continues virtually true of the 131 other railroads today." He blamed "banker control" for present car shortages, which he declared, are encouraging long haul highway freight. "An ample supply of freight cars, faster train schedules, efficient pick-up and delivery, and container interchange to the rails would relegate the truck to its true economic sphere—the short haul," he continued.

"Banker-Lawyer Oligarchy"

Mr. Young accused the Interstate Commerce Commission and the "banker interests" of combining to the detriment of security and policy holders, saying:

"It is through the 131 railroads, thus closely knit together through the A.A.R. and their 1,800 political lawyers networked across the country, that a Morgan-dominated handful of New York investment bankers is enabled to more or less control the government, whatever the administration. Sixty-seven per cent of our senators, 56 per cent of our representatives, a majority of our governors are lawyers, four out of five of our presidential candidates—the fifth is law trained—many of them, they or their partners, are still indiscriminately accepting fees. Most of these lawyer-statesmen not currently retained directly or indirectly by the combine aspire eventually so to be.

"It is this investment-banker-lawyer oligarchy that successfully works for, or against the reappointment of members of the I.C.C., that infiltrates itself into key positions even in Democratic cabinets, that names Republican presidential candidates, or, as in the case of John W. Davis, Democratic ones as well. That is why the I.C.C., created by Congress in 1877 to foster competition in the railroad business, has been

completely suborned into an agency to foster monopoly. If you desire proof, read the Bulwinkle bill as originally sponsored by them. The I.C.C. has shockingly reversed its ordained role in many important issues, some of which I have told you and not the least of which were the recent railroad reorganization security wipe-out scandals in which our large Morgan-dominated insurance companies actually scuttled their own policyholders' investments—your investments—to gain control of railroads through voting trusts."

Threat of Socialization

In deploring the railroads' rate of return of less than three per cent on capital, Mr. Young blamed "short-sighted shippers, earning 20 to 50 per cent on their capital," for intervention against freight rate increases. He stated that continued miserly earnings would mean socialization for the railroads, and intimated that public control of the railroads would lead to early socialization of all industry. "In the Thirties," Mr. Young said, "the railroads defaulted in their bond interest and ruined most of our banks. Next time, with no operating income, no margin of safety, in the Fifties, will they also default in their payrolls and thus strike the death knell of free enterprise? If so, it will be a well-deserved death."

Roller Bearings

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Mr. Young was also asked if seniority rules had prevented talent from getting into the railroad industry. Mr. Young replied that to some extent seniority rules had prevented promotion of men already in the industry, but he blamed the railroads because they had agreed to the seniority rules. "If the railroads had run a public relations program during the war to eliminate all featherbedding," Mr. Young asserted, "they could have accomplished it."

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Minority members of the Senate appropriations committee have failed in their undertaking to have the Senate send the pending rivers and harbors and flood control appropriations bill back to that committee with instructions to reduce the proposed appropriations "by not less than $200,000,000." The Senate, on May 19, rejected a motion to that effect by a 55-to-18 vote, and then proceeded to pass the bill, which is the War Department Civil Functions Appropriation bill for the fiscal year ending June 30, 1949, carrying for rivers and harbors work the $195,084,400 recommended by the appropriations committee majority.

As passed by the House the bill, which this week went to a Senate-House conference committee, carried $151,831,300 for rivers and harbors work. In increasing that by $43,253,100, as indicated above, the Senate committee also raised the flood-control total by $58,124,800, bringing it up to $444,656,800. As noted in the *Railway Age* of May 8, page 64, the dissenters were Senators Bridges of New Hampshire, chairman of the committee, Reed of Kansas, and Ferguson of Michigan, all Republicans. Among the 18 senators supporting their motion to recommit were two of the Senate's Republican leaders—Senator Taft of Ohio and Senator Vandenberg of Michigan.

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"The national transportation policy calls for the developing, coordinating and preserving of a national transportation system by rail, highway, air, and water adequate to meet not only the needs of commerce and the postal service but of the national defense," Mr. Wolverton said. "Testimony at this hearing on our defense transportation system will be sought only from the various carriers and the industries supplying them with maintenance materials and equipment. Involved are air, railroad, coastwise and inland water carriers as well as private and common automotive transportation; automotive manufacturers and parts industry, railroad locomotives and car builders, ship builders, aircraft frame and component manufacturers, and their material and component suppliers. Pipe line transportation will not be covered by this

ter yard at an estimated total cost of $393,000. Also, a 60-ton 4-screw, electrically-operated model B drop table has been ordered from the Whiting Corporation, Harvey, Ill., for use in a new drop pit at the Marshall, Tex., roundhouse. Delivery of the new table will not be made before next year and the construction of the pit probably will be done by contract. The total cost of this project is estimated at $31,300.

FINANCIAL

I.C.C. Report Criticizes C. & O's Current Assets Position

Division 4 of the Interstate Commerce Commission has authorized the Chesapeake & Ohio to assume liability for $4,450,000 of 2¼ per cent equipment trust certificates, the proceeds of which will be applied toward the purchase price of 500 70-ton all-steel covered hopper cars, 4 2,000-hp. Diesel-electric passenger locomotives and 10 0-8-0 type steam switching locomotives, estimated to cost $4,495,608, as outlined in *Railway Age* of May 15, page 214.

In approving the application, the commission noted that, as of February 29, the C. & O.'s total current assets of $72,432,715, exclusive of $22,353,249 representing material and supplies, were $10,106,968 less than its current liabilities of $82,539,683, "thus suggesting that funds would not be available for purposes other than the payment of current obligations."

"In view of this unfavorable current assets position," the commission said, "it is quite understandable that the applicant should want to borrow substantially the entire cost of its new equipment instead of making the customary initial payment on it. This, of course, renders the issue less desirable and if continued on an extensive scale is likely to have an adverse effect on the price of such securities. The practice also tends to aggravate the burden of early maturities which is already assuming considerable importance in the case of this applicant. Notwithstanding these considerations, however, one circumstance convinces us that we may properly approve this application without modification. The applicant has a long and favorable record of earnings and dividends. It is currently devoting about $24,000,000 a year to such purposes. On the basis of recent earnings, therefore, there is a cushion of substantially that amount per annum available to absorb shocks prior to any jeopardy resulting from applicant's debt structure."

The commission also noted that C. & O. has placed orders for additional equipment estimated to cost $55,500,000. It is expected, the commission said, that approximately $2,100,000 of that equipment will be purchased for cash and that all or the major portion of the cost of the remainder will be financed through the issue of equipment trust certificates or securities under conditional-sale contracts.

"Because of the extraordinary program of acquisition of new equipment and improvements and extensions of the applicant's lines that has been undertaken, and in view of the prevailing low rates of interest on equipment obligations, the applicant is of the opinion that it is sound financial practice to provide the greater part of the funds required for the acquisition of equipment in this manner, so that its other funds may be applied to the retirement of maturing obligations and to improvements and extensions of its lines of railroad," the commission added. "Obligations maturing during the remainder of the year aggregate approximately $9,600,000, consisting of $7,500,000 of equipment obligations and $2,100,000 of mortgage bonds. Of the latter, $761,000 will be retired through the operation of sinking funds. As of March 1, 1948, the unexpended balance sheet of the cost of roadway projects authorized by the board of directors, chargeable to the investment account, was $27,528,274. During the period January 1, 1937, through December 31, 1947, the applicant made a net deduction of $44,206,000 in all publicly held debt. Mortgage debt was reduced $44,299,000, serial note debt was decreased by $15,300,000 and there was a net increase of $15,393,000 in equipment obligations.

Insofar as the present issue of certificates is concerned, the commission's report approves a selling price of 99.297 with a 2¼ per cent interest rate, the bid of Harris, Hall & Co., and associates, which had been accepted subject to commission approval, and on which basis the average annual cost will be approximately 2.40 per cent. The certificates will be dated May 15 and will mature in 10 annual installments of $445,000, starting May 15, 1949.

Merge C. & O., Virginian And New York Central—Young

The Chesapeake & Ohio is considering making an application to the Interstate Commerce Commission, probably within the next three months, for approval of a three-way merger of its properties with those of the New York Central and the Virginian, under C. & O. control, according to a statement in San Francisco, Cal., last week by Robert R. Young, chairman of the C. & O. This comment followed announcement of the Interstate Commerce Commission's refusal to allow Mr. Young, and Robert J. Bowman, president of the C. & O., to become directors of the New York Central while retaining their C. & O. positions, as reported in *Railway Age* of May 22, page 32.

Mr. Young said the C. & O. might offer to purchase the stock of the Virginian, which is understood to be closely held, and he indicated it already had been offered to him. Acquisition of the Virginian stock is not essential to establish control by merger, however, he suggested. The I.C.C. decision leaves the way open for bringing the C. & O. and New York Central under one control, the C. & O. chairman went on to say, because it was based mainly on the adverse effect of such a merger on the Virginian, a consideration that would be removed by including the Virginian in the merger.

The present low credit position and earning power of the railroads is a result of I.C.C. administration of the laws regulating the industry, Mr. Young continued. The commission, he said, should be thoroughly overhauled by Congress, as it is responsible for the railroads earning only 2 or 3 per cent while other regulated industries were allowed to earn 6 to 9 per cent. A fair average return for the railroads would be 6 per cent, he continued, and that means they should be allowed to earn 10 per cent in prosperous years as a cushion against times of adversity.

To reduce expenses and increase efficiency the railroads of the country ought to be consolidated into 15 or 20 regional systems, in Mr. Young's opinion. The only way to keep rates down, he declared, is to eliminate some of the 131 railroad presidents and 131 expensive headquarters and staffs.

New Securities

The following **applications** have been filed with the Interstate Commerce Commission:

Pennsylvania.—To assume liability for $11,055,000 of series U equipment trust certificates, part of a proposed overall issue of $31,710,000 of series U certificates. Proceeds from the sale of the entire issue will be applied toward the purchase price of the following equipment:

	Description and Builder	Estimated Unit Price
22	600-hp. Diesel-electric switching locomotives (Electro-Motive Division, General Motors Corporation)	$76,000
16	1,000-hp. Diesel-electric switching locomotives (Electro-Motive)	97,000
14	660-hp. Diesel-electric switching locomotives (American Locomotive)	76,000
15	1,000-hp. Diesel-electric switching locomotives (Alco)	97,000
1	1,000-hp. Diesel-electric switching locomotive (Alco)	121,000
20	1,000-hp. Diesel-electric switching locomotives (Fairbanks, Morse & Co.)	97,000
34	660-hp. Diesel-electric switching locomotives (Baldwin Locomotive Works)	76,000
38	1,000-hp. Diesel-electric switching locomotives (Baldwin)	97,000

Proceeds from the certificates also will be applied toward the cost of 2,000 gondola cars, at estimated unit prices ranging from $4,225 to $5,000, and 300 covered hopper cars, at approximately $7,500 each, all to be built in the applicant's own shops. The aplicant also ad-

News Department continued on next left-hand page

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hearing since it is a part of the committee's concurrent fuel study which covers the petroleum, gas, coal, and electric power industries."

The committee as its chairman put it is "anxious" to hear from the carriers on:

1. Present financial and manpower resources, and condition of physical plant and equipment, and their ability to handle any increased demands for service.
2. Expansion plans.
3. Existing restrictions on capacities and operations, bottlenecks in physical facilities, material, manpower or finances, and suggestions as to means for improvement.
4. Recent and current changes from prewar and wartime situations increasing capacity to perform transportation service, such as centralized traffic control, terminals, improved highways and strengthened bridges, new airport and air navigational facilities, new types of power, and the like.
5. Economic and technological changes and trends within and without the transportation industry affecting its ability to provide service, such as the availability of fuel, especially of petroleum; adequacy in normal and emergency times of the supply of specific products like jet fuel, gasoline, Diesel and fuel oils; the alteration of types of power or efficiencies of engines to conform to or best utilize such petroleum products; the retention of stand-by railroad coal and water facilities for alternate type of power utilization, and the like.
6. Correlation of transportation capacities and operations, particularly at ports as to water, motor, and rail facilities.
7. Practices in and lessons learned from the last war regarding amount of shipper and passenger cooperation obtainable in increasing transportation facilities, present and prospective situation.

From the industries engaged in supplying transportation maintenance supplies and equipment, the committee "wishes" to hear:

1. Present ability to provide supplies and equipment, such as railroad rolling stock and rail, ships, aircraft and parts, motor vehicles, and the like.
2. Existing restrictions on capacities and operations, bottlenecks in physical facilities, material, components, manpower, or finances and suggestions as to means for removal.
3. Experience in the last war, any differences in today's situation, and feasibility of reapplying practices of curtailment or conversion of the transportation supply industries, such as any minimum essential production of passenger automobiles, trucks, or civilian aircraft; use of locomotive, car building, and bus manufacturing facilities for war purposes, and the like. The data and suggestions obtained in the current hearing will be subject to further study and analysis by the Committee and its staff.

Washington Hearing in Bus Fare Probe Postponed to July 15

The Interstate Commerce Commission has set back to July 13 its scheduled June 15 hearing at Washington, D. C., with respect to its No. MC-C-550 investigation of bus fares. The hearing previously had been postponed from March 1 to June 15.

Freight Car Loadings

Loadings of revenue freight in the week ended May 22 totaled 879,158 cars, the Association of American Railroads announced on May 27. This was an increase of 31,755 cars, or 3.7 per cent, above the preceding week, a decrease of 11,447 cars, or 1.3 per cent, under the corresponding week last year, and an increase of 307,685 cars, or 53.8 per cent, above the equivalent 1946 week, when loadings were affected by labor troubles in the coal mines and on the railroads.

Loadings of revenue freight for the week ended May 15 totaled 847,403 cars, and the summary for that week as compiled by the Car Service Division, A. A. R., follows:

Revenue Freight Car Loadings
For the Week Ended Saturday, May 15

District	1948	1947	1946
Eastern	152,480	162,591	132,278
Allegheny ..	180,236	189,716	134,773
Pocahontas .	71,598	73,951	54,193
Southern ...	137,781	139,014	106,797
Northwestern	121,716	131,377	89,361
Cent. West.	120,643	125,539	114,493
Southwest. .	62,949	66,020	56,315
Tot. West. Dists. ...	305,308	322,936	260,169
Tot. All Rds.	847,403	888,208	688,210
Commodities:			
Gr. & gr. prods. ...	38,019	42,286	42,138
Livestock ...	9,248	13,225	14,641
Coal	194,572	189,419	139,485
Coke	14,929	14,288	4,962
For. prods. .	42,985	48,356	34,820
Ore	73,923	72,597	25,581
Merch'd. l.c.l.	107,403	121,042	119,056
Misc.	366,424	386,995	307,527
May 15	847,403	888,208	688,210
May 8	880,617	884,242	684,942
May 1	891,638	882,574	671,311
April 24 ...	852,309	893,712	660,264
April 17 ...	784,668	865,844	650,843
Cumulative total, 20 weeks	15,459,677	16,405,311	14,381,491

In Canada.—Carloadings for the week ended May 15 totaled 77,458 cars as compared with 75,332 cars for the previous week and 77,900 cars for the corresponding week last year, according to the compilation of the Dominion Bureau of Statistics.

	Revenue Cars Loaded	Total Cars Rec'd from Connections
Totals for Canada:		
May 15, 1948 ...	77,458	33,876
May 17, 1947 ...	77,900	36,639
Cumulative totals for Canada:		
May 15, 1948 ...	1,457,692	714,500
May 17, 1947 ...	1,401,598	749,031

Demands Congress Outlaw National Transport Strikes

Neither railroad labor unions nor any other group of citizens should be permitted to act collectively against the public interest, Donald D. Conn, executive vice-president of the Transportation Association of America, said this week in a letter addressed to 125,000 persons in 8,500 towns and cities of the United States. Calling upon all local farm, trade and civic organizations throughout the country to demand that Congress outlaw national strikes in transportation and return the railroads immediately to private operation, Mr. Conn's letter asserted that "the Railway Labor Act has failed of its purpose since 1940. It has neither prevented strikes nor the threat of strikes."

"Transportation is the most vital of all public services," the letter continued. "The daily lives of men, women and children everywhere depend upon it. It influences the destiny of every enterprise. . . .For the third time since 1940 the government has been forced to take over the railroads to avert the catastrophe of a nation-wide strike. . . . Three labor unions refused to accept the decisions of a neutral fact-finding board appointed by the president under the procedures established by the Railway Labor Act. Labor unions have exhausted such procedures for maximum gain and then resorted to political pressure for more."

Canadian Brotherhood Members Voting on Strike Proposals

A. R. Mosher, president of the Canadian Brotherhood of Railway Employees and Other Transport Workers, said last week that members of his union, which represents about 30,000 railroad employees, are voting preponderantly in favor of a strike to back up the union's demands for higher wages. Canadian government officials reportedly expect that a similar vote being taken among 112,000 employees of 18 international affiliated brotherhoods also will be strongly in favor of a walkout. Results of that vote are not expected to be announced until the latter part of June.

C. L. Heater Awarded Medal By Steel Founders' Society

Charles L. Heater, vice-president and a director of the American Steel Foundries, at Chicago, was recently awarded the technical and operating medal of the Steel Founders' Society of America, at the organization's annual meeting held in Chicago. Mr. Heater was honored for his contributions to the technical and operating work of the society.

Sees Subsidies for Railroads

It may be necessary for the federal government to subsidize the railroads to enable them to maintain their fixed property at a standard consistent with the needs of national defense—such was the opinion expressed by Thurman Van Metre, professor of transportation at Columbia University, in an address to the New York Railroad Club on May 20.

Professor Van Metre explained that the national interest patently requires continuing improvements both to railroad plant and to rolling stock. Rolling stock renewals and improvements are readily financed through the sale of equipment obligations, but funds to provide for additions and betterments to fixed plant are not so easily obtainable from investors. The financing of improvements to fixed property is also a more serious problem than that of equipment purchases because, normally, necessary expenditures for plant improvements exceed those required for additions to rolling stock and motive power.

The carriers' ability to attract investment money rests, fundamentally, in the magnitude and reliability of the net income which they earn, the speaker explained. In the past couple of years the railroads earned only 3.6 per cent on their investment while the manufacturing industry earned 17.6 per cent and the trade, mining and amusement in-

dustries earned above 15 per cent. It is difficult for the railroads to make an effective bid for investment capital against the bids of other industries which have so much more attractive earnings records.

Even more formidable competitors for investment funds are the states and municipalities, which offer securities which are safer on the average than railroad bonds and are more attractive, also, because of their tax-exemption feature. There are very few railroads which have any hope of selling equity securities, in the opinion of the speaker, and comparatively few of them would be able to float bond issues at reasonable prices, in view of the tendency of institutional investors to reduce the ratio of their holdings of railroad securities.

Another disadvantage that the railroads suffer is the persistent favoritism shown by the government to rival agencies of transportation—all in the name of national defense—though these other agencies are certainly not any more necessary to national defense than the railroads are. The railroads, of course, can employ "internal financing" for a considerable volume of plant improvement—that is, pay for such improvements out of earnings. The recent policy of relative liberality of the Interstate Commerce Commission regarding rate increases is helpful in this direction. However, such "internal financing" will probably be insufficient to the need and, in the speaker's opinion, subsidies may be required in order to enable the railroads to maintain plant improvement expenditures at a level adequate to the public interest.

The speaker closed his remarks by calling attention to the fact that the I.C.C. in its entire history has had only 4 members from New York, who have served but 14 of the 498 cumulative years of service represented on the I.C.C. He also called attention to the slight degree of representation from eastern territory on the present commission, there being but one member from that area.

J. B. Morrow Elected President Of Bituminous Coal Research

James B. Morrow, first vice-president of the Pittsburgh Consolidation Coal Company, was elected president of Bituminous Coal Research, Inc., last week at the organization's annual convention and exhibition in Columbus, Ohio. Mr. Howard, an authority on coal preparation who has written extensively on the subject of the cleaning and sampling of coal, succeeds Howard N. Eavenson. In 1944 the American Institute of Mining and Metallurgical Engineers presented him with the Percy Nicholls Award for notable scientific and industrial achievements in the field of solid fuels.

Representatives of 16 railroads and 322 coal and coal-burning equipment companies of the United States and Canada attending the convention were told of progress during 1947 in the fields of coal-fired gas-turbine locomotive development, improvement of steam locomotive performance, hand-fired and automatic residential heating equipment, improved coal utilization in industrial plants and smoke elimination principles and devices for industrial plants.

Richard B. Engdahl, of the staff of the Battelle Memorial Institute's fuel division, cited advancements in coal-fired locomotive combustion based on B.C.R. research. The development work on coal-fired gas-turbine locomotives was outlined by Charles Kottcamp of the B.C.R.'s locomotive development committee and Charles E. Lawall, assistant vice-president of coal traffic and development of the Chesapeake & Ohio, told the delegates about the formation and objectives of the new B.C.R. mining development committee which expects to design a continuous mining machine in the next two years.

P.R.R. Police Officers Finish Criminal Procedure Course

Seventy-four police officers of the Pennsylvania recently received certificates of attainment after having completed a 20-weeks' course of study in all phases of criminal procedure, scientific investigation, laboratory technique, first aid and public relations. The course was conducted in cooperation with the Pennsylvania Chiefs of Police Association whose president, Lawrence L. Kindig, along with Lee V. Boardman, special agent in charge, Federal Bureau of Investigation, Philadelphia, Pa., and Harry L. Nancarrow, general manager of the road's eastern region, awarded the certificates.

EQUIPMENT AND SUPPLIES

Southern Pacific to Buy Five New "Sunset Limiteds"

The Southern Pacific has announced plans for the purchase of 5 new Diesel-powered "Sunset Limited" trains for use in daily service between New Orleans, La., and Los Angeles, Cal., at an approximate cost of $15,000,000. Motive power for the new trains will include three 6,000-hp. and six 4,000-hp. locomotives, to be built by the American Locomotive Company. Each of the trains will consist of 15 cars, on which the road is inquiring for bids, including a baggage-mail car, a dormitory car, 4 chair cars, a coffee shop-lounge car, a dining car, a full lounge car with a barber shop and other specialties, and six sleeping cars featuring room space only. In addition, the road is inquiring for three extra cars: a diner, a lounge car and a baggage-mail car. Delivery of all the equipment is expected late next year. Plans call for the new trains to have an approximate 42-hour schedule between terminals, speediest in the history of the route and about seven hours faster than present running times.

FREIGHT CARS

The **Illinois Central** next year will order 1,975 freight cars from contract builders and 3,000 freight cars from its own shops, it was announced this week by Wayne A. Johnston, president. Included in the new equipment, to cost more than $20,000,000, will be 1,500 hopper cars, 100 covered hopper cars and 375 flat cars, all to be ordered from contract builders, and 3,000 hopper cars to be built in the Centralia, Ill., shops.

The **St. Louis-San Francisco** has ordered 130 10,000-gal. tank cars from the American Car & Foundry Co. Delivery is scheduled for the third quarter of 1949.

The **Erie** has ordered 11 heavy-duty 125-ton flat cars from its Dunmore, Pa., shops. Six of the cars will be of the depressed-well type with a height-above-track of 2 ft. The other five will be standard flat cars, 50-ft. long with 6-wheel trucks. Construction is scheduled to begin about June 1.

LOCOMOTIVES

The **Chicago & Eastern Illinois** has ordered 21 Diesel-electric locomotive units from the Electro-Motive Division of the General Motors Corporation at an estimated cost of $3,085,000. Included in the new equipment are 15 freight, 2 passenger and 2 branch line units (of 1,500-hp. each), and 2 1,000-hp. switching units. Deliveries are scheduled to begin next July and to be completed early in 1949.

HIGHWAY

The **Missouri Pacific Transportation Company**, bus subsidiary of the Missouri Pacific, has ordered 25 highway buses at an estimated cost of $328,025. Ten of the new vehicles, ordered from the truck and coach division of the General Motors Corporation, will be Diesel-powered, air-conditioned parlor coaches costing $18,300 each. The remaining 15 coaches, ordered from the C. D. Beck Company, Sidney, Ohio, well be of the gasoline-powered, front-engine type and will cost $9,675 each. Delivery of the buses is scheduled for this year.

SIGNALING

The **Chicago Great Western** has placed orders with the Union Switch & Signal Co. for the necessary materials for the modification of the existing automatic block signaling on the 64-mi. single-

(*Additional General News appears on page 70*)

track line between Oelwein, Iowa, and McIntire, involving new Style-H-2 searchlight signals with all necessary relays, switch boxes, rectifiers, transformers and housings. The field work will be done by the regular construction forces of the railroad.

The **Wisconsin Central** has ordered equipment from the General Railway Signal Company for the installation of absolute permissive block signaling between Spencer, Wis., and Neenah, a distance of about 100 mi. Type-SA searchlight signals, Type-W marker units, Type-K relays, and Model-7 switch circuit controllers will be used in this installation.

CAR SERVICE

I.C.C. Service Order No. 790, which authorizes the director of the commission's Bureau of Service to require the furnishing of cars to mines for railroad-fuel loading without regard to car distribution rules, has been modified by Amendment No. 2, which set back the expiration date from May 31 until November 30, and added two new paragraphs (g) and (h), effective May 31. Paragraph (g) requires certification from roads acquiring fuel coal under the provisions of the order immediately when fuel coal stock piled or in cars held loaded on their lines reaches the amount of 16 days' supply. Paragraph (h) requires current weekly reports showing the total number of cars furnished to mines for the preceding week under the authority of the order, and indicating with respect to each mine how many such cars were in excess of the weekly distributive share of car supply of such mine.

The Office of Defense Transportation's General Permit ODT 18-A, Revised 39-A, has been modified by Amendment No. 1 which set back the expiration date from May 31 until July 1. The permit authorizes shipments of new fresh-harvested Irish potatoes (a) from any point in the United States, except Arizona, California, or New Mexico, in lots, when iced or when ice is available, of not less than 36,000 lb. minimum weight, and in lots, when ice is not available, of 30,000 lb. minimum weight; (b) from any point in Arizona, California, or New Mexico in lots of not less than 36,000 lb. minimum weight.

The A.A.R. Car Service's Special Car Order No. 49, which is designed to expedite the return home from the East of plain box cars of the XM type owned by southwestern roads, has been modified by Supplement No. 1, effective May 26. The order was issued to assist the southwestern roads in their preparations for handling the winter wheat movement which will be under way in a few weeks; and it originally required Eastern, Allegheny, Pocahontas and Southern roads to return the western cars empty, the only exception to that requirement being an authorization for certain loadings with l.c.l. freight (see *Railway Age* of April 24, page 70). Supplement No. 1 liberalizes the requirement, permitting any loading to Chicago, Peoria, Ill., St. Louis, Mo., Memphis, Tenn., New Orleans, La., or any station on the line of the owner of the car involved; also, to any station in Iowa, Nebraska, Kansas, Missouri, Arkansas, Oklahoma, Texas, Louisiana, or Illinois "west of a line drawn through Peoria to St. Louis." The cars "must not be delayed or backhauled to obtain such loading and in the absence of *immediate loading* must be returned empty in home route or short route."

I.C.C. Service Order No. 815, issued May 21 and effective June 1, excludes Sundays and holidays in computing free time with respect to the unloading of coal at Great Lake Ports. The order will expire December 31, unless otherwise ordered. According to the commission, the free time published in tariffs for unloading coal cars at Great Lakes ports aggravates the shortage of such cars. It is of the opinion, the commission said, that an emergency exists requiring immediate action at such ports to alleviate the car shortage.

SUPPLY TRADE

Carl R. Fox, recently elected to the board of directors of the **Cummins Engine Company,** as reported in *Railway Age* of May 1, page 58, was incorrectly described in that issue as a former vice-president and works manager for the firm. Mr. Fox, who has been a vice-president and works manager for Cummins Engine for several years, retains both positions.

William J. Savage, formerly eastern sales manager of the primary battery division of **Thomas A. Edison, Inc.** has been appointed director of sales for the division, with headquarters as before at Bloomfield, N. J.

Robert Watson has been appointed representative of the railway equipment division of the **American Welding & Manufacturing Co.,** with headquarters in Chicago. Mr. Watson served an apprenticeship in locomotive construction and design at Kilmarnock, Scotland, in which country he was born. He came to the United States in 1923 and joined the Ingersoll-Rand Company as a machinist and, shortly thereafter, worked as a draftsman for the American Locomotive Company. In 1925 Mr. Watson joined the Erie as chief draftsman in Cleveland, Ohio, which position he held until 1929 when he joined the Firebar Corporation as mechanical and sales engineer. He was appointed sales engineer and western sales manager in 1932 for the Waugh Equipment Company. From 1938 to 1941 he worked for Manning, Maxwell & Moore in the same capacity and in the latter year he returned to Waugh Equipment as assistant to the president, and vice-president, the positions he held at the time of his recent appointment.

Luria Brothers & Co. has announced the removal of the Cleveland, Ohio, office to larger quarters at 1002 Midland building.

Raymond A. Quadt, formerly in charge of aluminum research operations for **Federated Metals,** a subsidiary of the American Smelting & Refining Co., has been appointed assistant manager of Federated's general aluminum department.

Earl O. Shreve, vice-president of the **General Electric Company** on the president's staff, and president of the U. S. Chamber of Commerce, has retired from the company after 44 years of service.

Wm. Wyer & Co. has announced the removal of its offices to 6 South Clinton street, East Orange, N. J. The company also has announced the addition to their staff of **James Laurie,** formerly assistant to the general freight agent of the Central of New Jersey, and more recently a member of the staff of the chief executive officer of that company.

It has been announced that the following divisions and subsidiaries of the **Raytheon Manufacturing Company** will be located at 50 Broadway, New York: The equipment sales division; the international division; the Russell Electric Company and the Submarine Signal Company. The publicity and broadcast equipment sales departments remain at 60 E. 42nd street, New York.

Lenvik Ylvisaker, formerly assistant production manager of the **Koppers Company,** at Pittsburgh, Pa., has been appointed assistant general manager of the piston ring division, with headquarters at Baltimore, Md., and **T. C. Jarrett,** chief metallurgist of the division since 1941, has been appointed manager of the engineering and development department of the division. **John H. Redmond,** formerly vice-president and general manager of Precisioneering, Inc., has been appointed assistant production manager, succeeding Mr. Ylvisaker.

The **Harnischfeger Corporation,** Milwaukee, Wis., has announced the establishment of a railroad division with offices in the main plant, 4400 West National avenue, Milwaukee, under the jurisdiction of their general traffic manager, **George A. Schmus.** Although

a new division in name, the announcement stated, the corporation has supplied the railroad industry for 65 years.

The **McConway & Torley Corp.** has announced the appointments of **Paul Y. Duffee** as chief engineer and **Graham J. Logan** as assistant superintendent.

Howard M. Hubbard has been elected president of the **Hydraulic Press Manufacturing Company,** succeeding **H. A. Toulmin, Jr.,** resigned.

The **Ross & White Co.,** at Chicago, has appointed **W. D. Jenkins,** 1317 Praetorian Building, Dallas, Tex., as its southwestern representative for the sale of "Blackhall" car washers and special railroad equipment.

The **Robert J. Wylie Company** of St. Paul, Minn., has been appointed railroad distributor for the **Koehring Company,** Milwaukee, Wis., manufacturers of heavy-duty construction equipment.

Raymond W. Rosenbach has been appointed midwest representative in the railroad field, at Chicago, of the **George B. Cross Company,** sales agents of transportation seating manufactured by **S. Karpen & Bros.**

Two new sales offices have been opened by the **Presstite Engineering Company** of St. Louis, Mo. An east coast office, with **James W. Bampton** in charge, is located in the Times Medical Building, Philadelphia, Pa. A new west coast office is located at 5960 Willowcrest Avenue, North Hollywood, Cal., with **Harry A. Lowry** in charge.

H. A. Gray, a vice-president of the **Eagle-Picher Mining & Smelting Co.,** at Cincinnati, Ohio, has resigned his position to handle personal business interests in Indiana.

M. H. Courtenay has been appointed Atlanta (Ga.) district manager of **SKF Industries, Inc.,** to succeed **Nils Miller,** retired.

Lawrence A. Franks has been appointed manager of the Boston district office of the **H. K. Porter Company,** with headquarters at 294 Washington street, Boston 8, Mass. Mr. Franks was formerly sales engineer for Bird & Sons, Inc.

Lawrence J. Kauffman, formerly scrap purchasing agent at the Pittsburgh, Pa., plant of the Federated metals division of the **American Smelting & Refining Co.,** has been promoted to assistant manager of operations at Houston, Tex. **Nathan J. Muskin** has been appointed scrap purchasing agent to succeed Mr. Kauffman.

John F. Deems has been elected a director and a vice-president of the **Magnus Brass Manufacturing Company** and also has been appointed manager of the Magnus brass division of the **National Lead Company.**

OBITUARY

Joseph Warren Young, retired eastern railway sales manager of the Kerite Insulated Wire & Cable Co., died at his home in Jersey City, N. J., on May 16. Mr. Young was born on November 3, 1876. He began his railroad career with the Delaware, Lackawanna & Western in 1896 and until 1912 was, at various times, associated with the Central of New Jersey, the New York Susquehanna & Western and the Erie. He was assistant signal engineer of the Erie at the time he joined the Kerite staff in 1912. He retired on December 1, 1946.

Rudolf M. Ostermann, formerly vice-president of the Superheater Company at Chicago, died at his home in Evanston, Ill., on May 4. He was 72 years old.

Thomas H. Henkle, retired western sales manager and special representative of the Edward G. Budd Manufacturing Company (now the Budd Company), at Chicago, died at his home in California on May 21, following a long illness. Mr. Henkle, who was considered one of the pioneers in the development of streamlined train equipment, retired in 1945.

ORGANIZATIONS

The 69th regular meeting of the **Great Lakes Regional Advisory Board** will be held at the Hotel Statler, Buffalo, N.Y., June 15 and 16. William White, president of the Delaware, Lackawanna & Western, will address the board's luncheon session. The rest of the program will be devoted to committee reports and a report on the national transportation situation by L. M. Betts, manager Railroad Relations Section, Car Service Division, Association of American Railroads.

The **Ohio Valley Transportation Advisory Board** will hold its 86th regular meeting on June 16, at the Claypool Hotel in Indianapolis, Ind. Colonel J. Monroe Johnson, director of the Office of Defense Transportation, will address the luncheon session.

E. A. Ryder, assistant to the vice-president, traffic, Canadian National was recently elected president of the **Traffic Club of Montreal.** Other officers elected were P. A. Marchand, traffic manager, Ballaregon Express Ltd. — first vice-president; W. T. Ritchie, assistant superintendent, Canadian Nation Express — Second vice-president; and F. J. McCann, traffic manager, Northern Electric Company — secretary and treasurer.

CONSTRUCTION

Bessemer & Lake Erie.—This road has authorized the following projects, the probable costs of which are shown in parentheses: Constructing an overhead highway bridge at Euclid, Pa. ($67,000); and building a concrete dam at Albion, Pa. ($33,500).

New York Central. — This road has awarded the following contracts: To the Erie City Iron Works, Erie, Pa., for three 460-hp. drum boilers to be installed in a power station at Buffalo, N. Y.; to the Henry DuBois' Sons Company, New York, for dredging both sides of pier 9 at Weehawken, N. J.; and to H. F. Stimm, Inc., Buffalo, for reconstructing the superstructure of span 3-4 on bridge L268-A, Buffalo.

Norfolk Southern.—This road has authorized the following projects, to be undertaken by company forces at the probable costs shown in parentheses: Replacing 80-lb. rail with 100-lb. rail between mile posts 187 and 188 ($31,387); and constructing a perishable freight station at Euclid, Va. $74,227).

Northern Pacific.—This company has applied to the Interstate Commerce Commission for authority to construct a branch line extending approximately 4 miles from a point near Mitchell Spur, Wash., to Moses Lake, to serve agricultural developments.

Reading.—This road has awarded the following contracts, the estimated costs of which are shown in parentheses: To the H. S. Rau Company, Philadelphia, Pa., for pointing bridge 6/24, east of Wissahickon, Pa. ($20,000); and to the Lundy Construction Company, Williamsport, Pa., for constructing Diesel engine facilities at Newberry Junction, Pa. ($40,000).

Texas & Pacific. — This road has awarded a contract to the Spencer Construction Company, Carrollton, Texas, for the grading work, consisting of approximately 2,000,000 cu. yd. of compacted earth embankment, connected with a program involving the relocation of the road's main track where it runs through the Morganza floodway project near Melville, La. It is estimated that this portion of the work, to be started in the near future, will cost about $1,000,000. As estimates stand now, the entire job will take two years to complete, although it will be some time before bids are invited on the concrete trestle work and the track work. The road's own forces are engaged on a project consisting of the retirement and rearrangement of some of the existing tracks and the construction of additional trackage involving a net increase of about 33,000-ft. of track and the rearrangement of signal facilities in the Fort Worth, Tex., Lancas-

ter yard at an estimated total cost of $393,00 . Also, a 60-ton 4-screw, electrically-operated model B drop table has been ordered from the Whiting Corporation, Harvey, Ill., for use in a new drop pit at the Marshall, Tex., roundhouse. Delivery of the new table will not be made before next year and the construction of the pit probably will be done by contract. The total cost of this project is estimated at $31,300.

FINANCIAL

I.C.C. Report Criticizes C. & O's Current Assets Position

Division 4 of the Interstate Commerce Commission has authorized the Chesapeake & Ohio to assume liability for $4,450,000 of 2¼ per cent equipment trust certificates, the proceeds of which will be applied toward the purchase price of 500 70-ton all-steel covered hopper cars, 4 2,000-hp. Diesel-electric passenger locomotives and 10 0-8-0 type steam switching locomotives, estimated to cost $4,495,608, as outlined in *Railway Age* of May 15, page 214.

In approving the application, the commission noted that, as of February 29, the C. & O.'s total current assets of $72,432,715, exclusive of $22,353,249 representing material and supplies, were $10,106,968 less than its current liabilities of $82,539,683, "thus suggesting that funds would not be available for purposes other than the payment of current obligations."

"In view of this unfavorable current assets position," the commission said, "it is quite understandable that the applicant should want to borrow substantially the entire cost of its new equipment instead of making the customary initial payment on it. This, of course, renders the issue less desirable and if continued on an extensive scale is likely to have an adverse effect on the price of such securities. The practice also tends to aggravate the burden of early maturities which is already assuming considerable importance in the case of this applicant. Notwithstanding these considerations, however, one circumstance convinces us that we may properly approve this application without modification. The applicant has a long and favorable record of earnings and dividends. It is currently devoting about $24,000,000 a year to such purposes. On the basis of recent earnings, therefore, there is a cushion of substantially that amount per annum available to absorb shocks prior to any jeopardy resulting from applicant's debt structure."

The commission also noted that C. & O. has placed orders for additional equipment estimated to cost $55,500,000. It is expected, the commission said, that approximately $2,100,000 of that equipment will be purchased for cash and that all or the major portion of the cost of the remainder will be financed through the issue of equipment trust certificates or securities under conditional-sale contracts.

"Because of the extraordinary program of acquisition of new equipment and improvements and extensions of the applicant's lines that has been undertaken, and in view of the prevailing low rates of interest on equipment obligations, the applicant is of the opinion that it is sound financial practice to provide the greater part of the funds required for the acquisition of equipment in this manner, so that its other funds may be applied to the retirement of maturing obligations and to improvements and extensions of its lines of railroad," the commission added. "Obligations maturing during the remainder of the year aggregate approximately $9,600,000, consisting of $7,500,000 of equipment obligations and $2,100,000 of mortgage bonds. Of the latter, $761,000 will be retired through the operation of sinking funds. As of March 1, 1948, the unexpended balance sheet of the cost of roadway projects authorized by the board of directors, chargeable to the investment account, was $27,528,274. During the period January 1, 1937, through December 31, 1947, the applicant made a net deduction of $44,206,000 in all publicly held debt. Mortgage debt was reduced $44,299,000, serial note debt was decreased by $15,300,000 and there was a net increase of $15,393,000 in equipment obligations.

Insofar as the present issue of certificates is concerned, the commission's report approves a selling price of 99.297 with a 2¼ per cent interest rate, the bid of Harris, Hall & Co., and associates, which had been accepted subject to commission approval, and on which basis the average annual cost will be approximately 2.40 per cent. The certificates will be dated May 15 and will mature in 10 annual installments of $445,000, starting May 15, 1949.

Merge C. & O., Virginian And New York Central—Young

The Chesapeake & Ohio is considering making an application to the Interstate Commerce Commission, probably within the next three months, for approval of a three-way merger of its properties with those of the New York Central and the Virginian, under C. & O. control, according to a statement in San Francisco, Cal., last week by Robert R. Young, chairman of the C. & O. This comment followed announcement of the Interstate Commerce Commission's refusal to allow Mr. Young, and Robert J. Bowman, president of the C. & O., to become directors of the New York Central while retaining their C. & O. positions, as reported in *Railway Age* of May 22, page 32.

Mr. Young said the C. & O. might offer to purchase the stock of the Virginian, which is understood to be closely held, and he indicated it already had been offered to him. Acquisition of the Virginian stock is not essential to establish control by merger, however, he suggested. The I.C.C. decision leaves the way open for bringing the C. & O. and New York Central under one control, the C. & O. chairman went on to say, because it was based mainly on the adverse effect of such a merger on the Virginian, a consideration that would be removed by including the Virginian in the merger.

The present low credit position and earning power of the railroads is a result of I.C.C. administration of the laws regulating the industry, Mr. Young continued. The commission, he said, should be thoroughly overhauled by Congress, as it is responsible for the railroads earning only 2 or 3 per cent while other regulated industries were allowed to earn 6 to 9 per cent. A fair average return for the railroads would be 6 per cent, he continued, and that means they should be allowed to earn 10 per cent in prosperous years as a cushion against times of adversity.

To reduce expenses and increase efficiency the railroads of the country ought to be consolidated into 15 or 20 regional systems, in Mr. Young's opinion. The only way to keep rates down, he declared, is to eliminate some of the 131 railroad presidents and 131 expensive headquarters and staffs.

New Securities

The following **applications** have been filed with the Interstate Commerce Commission:

Pennsylvania.—To assume liability for $11,055,000 of series U equipment trust certificates, part of a proposed overall issue of $31,710,000 of series U certificates. Proceeds from the sale of the entire issue will be applied toward the purchase price of the following equipment:

	Description and Builder	Estimated Unit Price
22	600-hp. Diesel-electric switching locomotives (Electro-Motive Division, General Motors Corporation)	$76,000
16	1,000-hp. Diesel-electric switching locomotives (Electro-Motive)	97,000
14	660-hp. Diesel-electric switching locomotives (American Locomotive)	76,000
15	1,000-hp. Diesel-electric switching locomotives (Alco)	97,000
1	1,000-hp. Diesel-electric switching locomotive (Alco)	121,000
20	1,000-hp. Diesel-electric switching locomotives (Fairbanks, Morse & Co.)	97,000
34	660-hp. Diesel-electric switching locomotives (Baldwin Locomotive Works)	76,000
38	1,000-hp. Diesel-electric switching locomotives (Baldwin)	97,000

Proceeds from the certificates also will be applied toward the cost of 2,000 gondola cars, at estimated unit prices ranging from $4,225 to $5,000, and 300 covered hopper cars, at approximately $7,500 each, all to be built in the applicant's own shops. The aplicant also ad-

News Department continued on next left-hand page

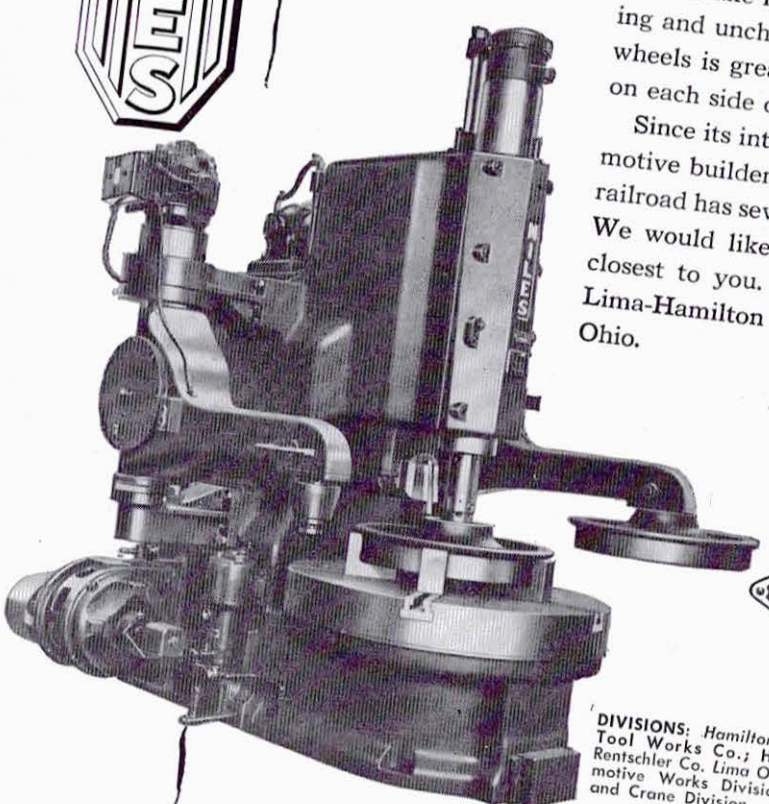
SAVE UP TO 15 MINUTES PER WHEEL

...with the NILES Hydraulic Car-Wheel Borer

THIS car-wheel borer may be furnished with a wide range of speeds and feeds so that either high-speed steel or carbide cutters may be used on the wheels. If desirable, carbide cutters may be used for rough boring and high-speed steel cutters for finish boring. After the desired speeds and feeds are selected, they will be automatically engaged at the proper time during the cycle.

After the cycle is started by the movement of a lever, it is entirely automatic including the application of the table brake and the return of the boring bar to its starting position. The wheels are chucked and unchucked automatically by simply pressing the "chuck" and "unchuck" buttons. The table brake is automatically applied to assist during chucking and unchucking operations. Loading and unloading the wheels is greatly facilitated by the use of two cranes, one on each side of the machine.

Since its introduction, 28 railroads and nine car and locomotive builders have purchased 62 of these machines. One railroad has seven machines now installed in its repair shops. We would like to put you in touch with the installation closest to you. For arrangements, write R. S. Henninger, Lima-Hamilton Corporation, 548 Niles Ave., Hamilton, Ohio.



LIMA HAMILTON CORPORATION

DIVISIONS: Hamilton, Ohio — Niles Tool Works Co.; Hooven, Owens, Rentschler Co. Lima Ohio — Lima Locomotive Works Division; Lima Shovel and Crane Division.

PRINCIPAL PRODUCTS: Niles heavy machine tools; Hamilton diesel and steam engines; Hamilton heavy metal stamping presses; Hamilton-Kruse automatic can-making machinery; Locomotives; Cranes and shovels; Special heavy machinery; Heavy iron castings; Weldments.

vised the commission that it has invited bids on the following equipment, which also will be financed from the sale of the certificates: 14 2,000-hp. Diesel-electric passenger locomotives, 47 1,500-hp. Diesel-electric freight locomotives and 12 2,000-hp. Diesel-electric switching locomotives. Cost of the latter 73 locomotives is expected to range between $151,000 and $240,000 per unit. The certificates will be dated July 1 and will be sold on the basis of competitive bidding.

Chicago, Milwaukee, St. Paul & Pacific.—To assume liability for $7,120,000 of Series DD equipment trust certificates, the proceeds of which will be applied toward the cost of the following all-steel passenger equipment to be constructed in the applicant's own shops at Milwaukee, Wis.:

Description	Estimated Unit Price
31 passenger coaches	$ 72,849
6 dining cars	85,798
2 luncheon-lounge cars	75,631
2 dining-lounge cars	75,642
8 parlor cars	71,881
4 observation-parlor cars	80,357
6 cafe-parlor cars	76,267
2 business cars	90,317
2 1,000-hp. motor cars	130,000

Proceeds of the certificates also will be applied toward the purchase of 1,800 50-ton gondola cars, at an estimated unit cost of $2,580, which will also be built in the applicant's own shops. The certificates, to be sold on the basis of competitive bidding, will be dated June 1 and will mature in 20 semi-annual installments of $356,000, starting December 1.

Division 4 of the I.C.C. has **authorized:**

Pennsylvania-Long Island.—To jointly assume liability for $4 035,000 of series K equipment trust certificates, part of a proposed issue of $9,480,000, the proceeds of which will be applied toward the purchase of equipment estimated to cost $10,592,500, as outlined in *Railway Age* of May 1, page 66. The equipment will be used by the Long Island. The certificates will be dated May 1 and will mature in 15 annual installments of $269,000, starting May 1, 1949. The report also approves a selling price of 99.2699 with a 2⅝ per cent interest rate, the joint bid of Harriman, Ripley & Co., and Lehman Brothers on which basis the average annual cost will be approximately 2.74 per cent. The certificates were reoffered to the public at prices yielding from 1.5 per cent to 2.9 per cent, according to maturity.

Average Prices Stocks and Bonds

	May 25	Last week	Last year
Average price of 20 representative railway stocks	54.78	54.66	42.24
Average price of 20 representative railway bonds	89.64	89.09	85.72

Dividends Declared

Alabama Great Southern. — ordinary (increased), $4.00; 6% participating preferred (increased), $4.00, both payable June 26 to holders of record May 26.

Boston & Albany. — $2.50, payable June 30 to holders of record May 29.

Erie & Pittsburgh. — 7% guaranteed, 87½¢, quarterly, payable June 10 to holders of record May 29.

Great Northern. — non-cum. preferred, $1.50, payable June 21 to holders of record May 24.

Illinois Central. — (Leased Lines), 4% guaranteed, $2.00, semi-annually, payable July 1 to holders of record June 11.

Kansas, Oklahoma & Gulf. — 6% preferred A, $3.00, semi-annually; 6% non-cum. preferred B, $3.00, semi-annually; 6% non-cum preferred C, $3.00, semi-annually, all payable June 1 to holders of record May 22.

Mobile & Birmingham. — 4% preferred, $2.00, semi-annually, payable July 1 to holders of record June 1.

Philadelphia, Germantown & Norristown. — $1.50, quarterly, payable June 4 to holders of record May 20.

Southern Pacific. — $1.00, quarterly, payable June 21 to holders of record June 1.

Union Pacific. — $2.50, payable July 1 to holders of record June 1.

United New Jersey & Canal. — $2.50, quarterly, payable July 10 to holders of record June 21.

Ware River. — guaranteed, $3.50, semi-annually, payable July 7 to holders of record June 23.

Wheeling & Lake Erie. — 75¢, payable July 1 to holders of record June 18.

RAILWAY OFFICERS

EXECUTIVE

Albert W. Hendrickson, whose promotion to assistant vice-president—traffic of the Minneapolis & St. Louis, at Minneapolis, Minn., was reported in *Railway Age* of May 15, was born on February 3, 1900, at Altoona, Wis. He began his railroad career in 1918 with the U.S. Railroad Administration, at Minneapolis, and in 1920 became employed in the general traffic department of the Minneapolis, St. Paul & Sault Ste. Marie. From 1922 to 1937, Mr.

Albert W. Hendrickson

Hendrickson served successively as traffic assistant with the Universal Portland Cement Company and as district traffic representative of the Universal Atlas Cement Company, at Minneapolis. He was appointed commercial agent for the M. & St. L. in 1937, advancing to manager of the industrial development department in 1941 and to freight traffic manager in 1944. Mr. Hendrickson was holding the latter position at the time of his recent advancement.

Roy W. Nelson, whose promotion to assistant vice-president—traffic of the Minneapolis & St. Louis at New York was reported in *Railway Age* of May 5, was born at Minneapolis, Minn., on September 20, 1898, and entered railroad service on July 24, 1914, in the freight claim department of the Minneapolis & St. Louis, advancing through various positions to freight claim inves-

Roy W. Nelson

tigator. After U. S. Naval service, he returned to the freight claim department of the M. & St. L. and on July 15, 1935, he became general agent at St. Paul, Minn., transferring to New York on May 1, 1937. Mr. Nelson was appointed assistant traffic manager at New York on April 15, 1938, and became eastern traffic manager at New York on November 15, 1939, which position has now been abolished.

W. C. Baker, general manager of the Chicago Terminal region of the Baltimore & Ohio at Chicago, has been promoted to assistant vice-president of operations and maintenance at Baltimore, Md., a newly created position. Mr. Baker entered the service of the

W. C. Baker

Baltimore & Ohio in April 1906, as a clerk at Baltimore. On September 12, 1912, he became secretary to the general superintendent; on May 28,

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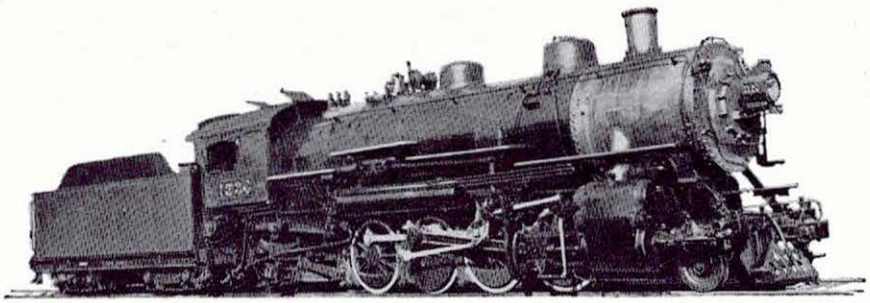
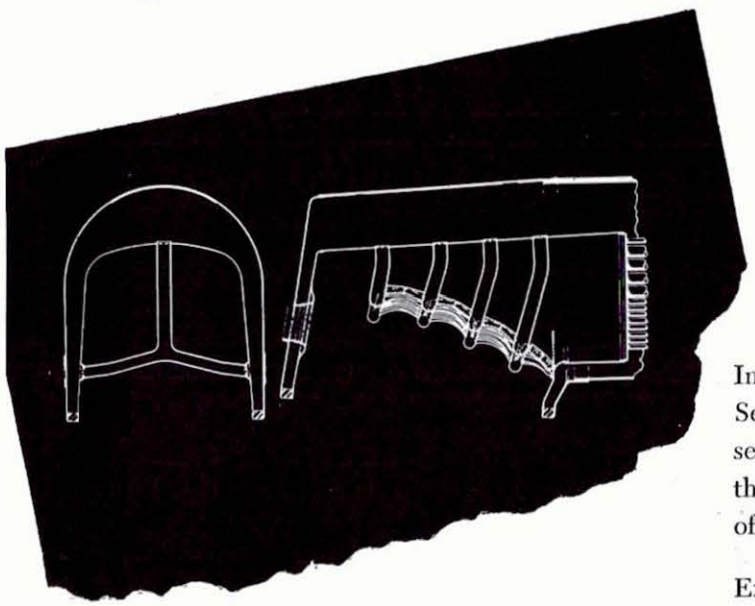


Security Circulators used in modernizing type 2-8-2 locomotives



Arrangement of Security Circulators in a coal-burning 2-8-2 locomotive

In equipping existing steam motive power with Security Circulators, most efficient results are secured because the number and arrangement of the Circulators are specifically adapted to the type of locomotive in which they are being installed.

Experience has shown that Security Circulators definitely tend to reduce honeycombing, flue plugging and cinder cutting, and to prolong the life of arch brick. Consequently the installation of Security Circulators in existing steam locomotives makes them available for much longer periods of *continuous operation.*

AMERICAN ARCH COMPANY, INC.

NEW YORK • CHICAGO

SECURITY CIRCULATOR DIVISION

1917, assistant trainmaster at Cumberland, Md., and on February 1, 1924, trainmaster at Connellsville, Pa. He was advanced to assistant superintendent of the Baltimore division on September 1, 1926, and on February 21, 1929, was transferred to Washington, Ind., in a similar capacity. On November 1, 1929 he was appointed superintendent of the St. Louis division and on May 1, 1932, superintendent of the consolidated St. Louis-Ohio division. He was transferred to the Akron-Chicago division at Akron, Ohio, on November 1, 1936, becoming general superintendent transportation at Baltimore on May 1, 1942, and general manager of the Chicago Terminal region on June 1, 1946, which position he held until his recent promotion.

Fred C. Berghaus, assistant to president of the Chicago, Indianapolis & Louisville, at Chicago, has been appointed vice-president-executive assistant at that point.

J. P. Kiley, vice-president of the Chicago, Milwaukee, St. Paul & Pacific, with headquarters at Seattle Wash., has been elected vice-president—operations, with headquarters at Chicago, effective on June 1. He will succeed **O. N. Harstad,** who because of illness, is relinquishing his duties as head of the road's operating department. Mr. Harstad has been elected vice-president, with duties as assigned by the railroad's president.

FINANCIAL, LEGAL and ACCOUNTING

Elzo L. VanDellen has been appointed attorney for the Western Pacific, with headquarters at San Francisco, Cal., succeeding **John E. Hennessy,** who has resigned.

OPERATING

Frank Griffin, whose retirement as general superintendent of the Quebec district of the Canadian National at Quebec, Que., was reported in *Railway Age* of May 8, was born at Quebec, on April 18, 1863, and entered railroad service in 1900 with the Quebec & Lake St. John (now C.N.R.). He served as clerk-messenger, stenographer, timekeeper-car checker, secretary to superintendent and chief clerk at Quebec until 1905. He then served until 1917 in various capacities with the Intercolonial and Canadian Government railways (now C.N.R.) at Levis, Que. Mr. Griffin became assistant superintendent of the Edmundston division of the Canadian National at Edmundston, N. B., in 1917, transferring to the Levis division one year later. He became superintendent of the St. Maurice division at Quebec in 1920, transferring to the Edmundston division a year later. In January, 1943, Mr. Griffin was appointed general superintendent of the Northern Ontario district at North Bay, Ont., and in July, 1944, he transferred to the Quebec district, where he remained until his retirement.

Lewis A. Evans, whose appointment as superintendent of the Pennsylvania, with headquarters at Indianapolis, Ind., was reported in *Railway Age* of April 24, was born on June 22, 1907, at Brownsville, Pa. Mr. Evans received a B. S. degree in civil engineering at Carnegie Institute of Technology in 1928, and in that same year he joined the Pennsylvania as assistant on the engineer corps at Newport, Pa. He subsequently served

Lewis A. Evans

as assistant supervisor of track at various points on the road, and advanced to supervisor of track at Milton, Pa., in 1934. He later served at several locations prior to his promotion to assistant division engineer at Fort Wayne, Ind., in 1943. In the following year, Mr. Evans was further advanced to division engineer at Terre Haute, Ind. He was transferred in 1945 to Philadelphia, Pa., where he was serving at the time of his recent promotion.

Robert F. Bauman, assistant to general manager of the New York, Ontario & Western at Middletown, N. Y., entered railroad service with the Nickel Plate in 1936 as a full time switchman and not during summer vacations, as was reported incorrectly in *Railway Age* of March 27, page 78. In 1940 Mr. Bauman was appointed transportation apprentice to the general manager and not to the chief engineer of the Nickel Plate.

E. W. Bedell has been appointed superintendent car service of the Lehigh & New England, with headquarters at Bethlehem, Pa., succeeding **Joseph R. Brown,** who has retired after more than 36 years of service.

S. J. Frazier, whose promotion to general manager of the St. Louis-San Francisco, at Springfield, Mo., was reported in *Railway Age* of May 1, was born on May 5, 1886 at Van Buren, Mo., and began railroading in 1900 as a section laborer with the Kansas City, Fort Scott & Memphis (now part of the Frisco). He later served in positions successively as telegraph operator, car clerk, car distributor, dispatcher and chief dispatcher. Mr. Frazier was appointed assistant superintendent at Chaffee, Ark., in 1914, and was transferred to Fort Smith, Ark., in 1923. He was advanced in 1926 to division superintendent at Enid, Okla.,

S. J. Frazier

a position he held also at Memphis, Tenn., from 1928 to 1937. His next post was that of assistant superintendent of transportation at Springfield, which he held from December 1, 1937, to August 16, 1938, when he became assistant to general manager. On December 1, 1942, Mr. Frazier was promoted to assistant general manager, in which capacity he was serving at the time of his recent appointment.

S. J. Massey, Jr., trainmaster of the Illinois Central, with headquarters at McComb, Miss., will become terminal superintendent at New Orleans, La., on June 1, succeeding to the duties of **T. J. Quigley,** terminal manager at that point, who will retire on that date. **H. L. Williams,** trainmaster at Grenada, Miss., will succeed Mr. Massey. **J. R. Sollivan,** assistant trainmaster at Birmingham, Ala., has been appointed to succeed Mr. Williams at Grenada.

Mr. Quigley has been in charge of I. C. operations at New Orleans for nearly 20 years, first as general superintendent and later as terminal manager. He was born on February 4, 1883, at Paducah, Ky., and began his career with the road in 1905 as a track apprentice. He subsequently served at various points on the road, holding positions successively as chainman, rodman, resident engineer, assistant engineer, supervisor, assistant roadmaster and roadmaster. He was appointed trainmaster at McComb in 1917, and in the following year he was advanced to division superintendent at that point. Mr. Quigley was transferred to Champaign, Ill., in 1926, and remained at that point until March 1, 1929, when he was further promoted to general superintendent of the I. C.'s Southern

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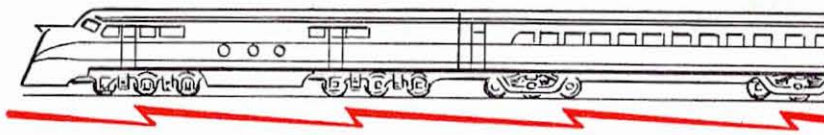
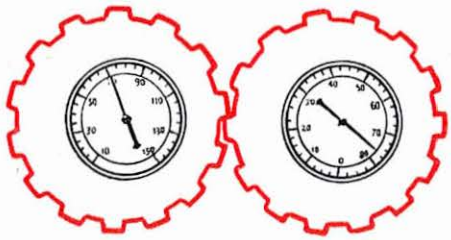
Electro-Pneumatic Brake



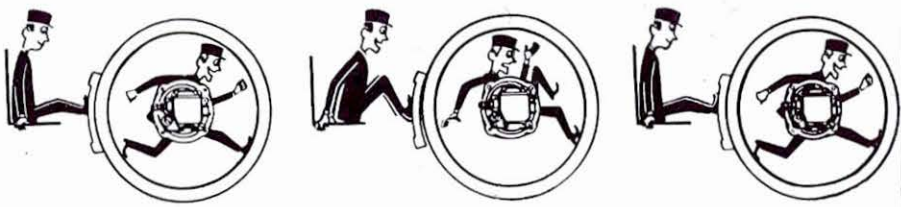
BRAKING IMPULSE TRANSMITTED TO EVERY CAR "IN A FLASH"

Speed Governor Control



MAXIMUM BRAKING PRESSURE "GEARED" TO SPEEDS

"AP" Decelostat



BRAKE PRESSURES MOMENTARILY "EASED" IN CASE OF WHEEL SLIP

WESTINGHOUSE HSC EQUIPMENT

gives a 3-Way Boost to Braking Efficiency

This modern equipment helps your trains to *make* time by *saving* time—improves schedules by bettering *average* speeds without increasing *top* speeds.

Braking pressure starts to develop on every car the moment the engineman applies the brake. Storage reservoirs are continuously recharged as air is used. Maximum retardation is assured by the Speed Governor Control which graduates maximum braking pressures to speeds, and by the "AP" Decelostat which momentarily "eases" braking pressures on individual trucks if wheel slip threatens.

Experience with the "HSC" Electro-Pneumatic Brake has indicated that on the average 1,000 mile run, the running time can be reduced as much as one hour—with increased passenger comfort. Sixty minutes snipped off the schedule, with no rise in existing speed ceilings. The saving and service possibilities are obvious.

Westinghouse Air Brake Co.

WILMERDING, PA.

lines at New Orleans. In 1931 his jurisdiction as general superintendent was extended to all lines south of the Ohio river. When the positions of general superintendent were discontinued on August 1, 1939, Mr. Quigley was appointed terminal manager at New Orleans, the post he held at the time of his retirement.

O. V. Horace, superintendent terminals of the Atlantic Coast Line at Jacksonville, Fla., has been appointed superintendent of the Jacksonville district, with headquarters at Sanford, Fla., succeeding **W. M. Black,** who has been transferred to the Montgomery district at Montgomery, Ala. **B. E. Seale** has been appointed acting trainmaster of the Waycross district at Waycross, Ga., succeeding **J. L. Kennedy,** who has been appointed superintendent terminals at Jacksonville.

H. F. Wyatt, superintendent of the Cumberland division of the Baltimore & Ohio at Cumberland, Md., has been promoted to general manager of the Chicago Terminal region, with headquarters at Chicago, suceeding **W. C. Baker** who has been promoted to assistant vice-president of operations and maintenance at Baltimore, Md. **T. J. Klauenberg,** superintendent of the Toledo division at Dayton, Ohio, has been transferred to the Monongah division at Grafton, W. Va., suceeding **R. A. J. Morrison,** who has been transferred to the Cumberland division at Cumberland, Md. **C. C. Pitcher,** superintendent of the Pittsburgh division at Pittsburgh, Pa., has been appointed chief of yard and terminal operations at Baltimore, succeeding **A. W. Coney,** who succeeds Mr. Klauenberg as superintendent of the Toledo division. **A. W. Colnot,** superintendent of the Chicago division at Garrett, Ind., has been transferred to the Akron division at Akron, Ohio, succeeding **C. T. Williams** who has been transferred to the Pittsburgh division, succeeding Mr. Pitcher. **T. E. Johnson,** assistant superintendent of the Pittsburgh division at Pittsburgh, has been appointed superintendent of transportation there, succeeding **J. E. Maxwell,** who succeeds Mr. Colnot as superintendent of the Chicago division at Garrett. **O. H. Fletcher,** trainmaster at Garrett, has been transferred to Pittsburgh to succeed **C. H. Richards,** who has been appointed assistant superintendent of the Pittsburgh division at Pittsburgh. **B. A. Johnson,** assistant road foreman of engines at Garrett, has been appointed trainmaster at Punxsutawney, Pa., succeeding **A. F. Carlson,** who has been transferred to Garrett. **William Henry,** road foreman of engines at Cumberland, has been appointed acting supervisor of locomotive operation, with the same headquarters.

Fred T. Scharlau, assistant superintendent freight transportation of the Chicago Junction and Chicago River & Indiana, with headquarters at Chicago, has been appointed superintendent freight transportation of these roads and of the Indian Harbor Belt. Mr. Scharlau will maintain offices at both Chicago and Gibson, Ind. **Virgil L. Woodward,** formerly agent at Gibson, Ind., succeeds Mr. Scharlau.

John C. Sidor has been appointed assistant to general manager (labor) of the Chicago & Western Indiana and the Belt of Chicago, with headquarters at Clearing, Ill.

Edward Gowdy, assistant chief dispatcher of the Union Pacific, at Cheyenne, Wyo., has been promoted to assistant superintendent of the Wyoming division, with headquarters remaining at Cheyenne.

TRAFFIC

William J. Raleigh, Jr., whose promotion to freight traffic manager of the Chicago South Shore & South Bend, at Chicago, was reported in the *Railway Age* of May 15, was born on June 28, 1902, at Chicago. Mr. Raleigh began his railroad career with the Chicago, Rock Island & Pacific in 1917, and in 1927 he joined the South Shore as a rate clerk. He was promoted to chief of tariff bureau in 1934 and to general freight agent in 1940. Mr. Raleigh was serving in the latter position at the time of his recent promotion.

Murray C. Smith, general agent, passenger department, of the Chicago, Rock Island & Pacific, with headquarters at Kansas City, Mo., will become general passenger agent at Fort Worth, Tex., on June 1, succeeding **T. W. Bowdry,** who will retire on that date. Mr. Smith will be succeeded by **Harry Grosch,** district passenger agent at Buffalo, N. Y. **Frank Zadach,** traveling passenger agent at Boston, Mass., will replace Mr. Grosch.

C. W. Campbell and **E. A. Woolen** have been appointed general agents of the Chesapeake & Ohio at Greenville, S. C., and Lynchburg, Va., respectively.

MECHANICAL

H. W. Wreford, chief inspector train lighting and air conditioning of the Canadian National at Montreal, Que., has been appointed electrical superintendent, St. Clair Tunnel, with headquarters at Port Huron, Mich., succeeding **W. J. Sealy,** promoted.

William H. Gimson, whose promotion to superintendent of motive power of the St. Louis-San Francisco at Springfield, Mo., was reported in *Railway Age* of May 8, was born at Memphis, Tenn., on September 13, 1887, and entered railway service with the Frisco as a machinist apprentice in September, 1904, at Memphis. Later he served as enginehouse foreman at the same point and, on March 1, 1917, he was appointed division foreman, with headquarters at Harvard, Ark. In the same year Mr. Gimson was advanced to general foreman, with headquarters at Monett, Mo., and in August, 1929, he was promoted

William H. Gimson

to shop superintendent at Tulsa, Okla. He was further promoted to master mechanic at Tulsa in 1941, and to assistant superintendent of motive power at Springfield in October, 1945. Mr. Gimson was holding the latter position at the time of his new appointment.

W. B. Berry, whose promotion to the newly-created position of chief mechanical officer of the St. Louis-San Francisco, at Springfield, Mo., was reported in *Railway Age* of May 8, was born at St. Louis, Mo., on December 13, 1881, and entered railway service on January 1, 1897, as a machinist apprentice of the Texas & Pacific at Marshall Tex. During the next few years he

W. B. Berry

served as a machinist on the T. & P., and then went with the Missouri Pacific, subsequently serving with the Chicago, Rock Island & Pacific, the Missouri-Kansas-Texas, the Southern Pacific, the Trinity & Brazos Valley, and the Atchison, Topeka & Santa Fe, in various capacities ranging from machinist to enginehouse foreman and

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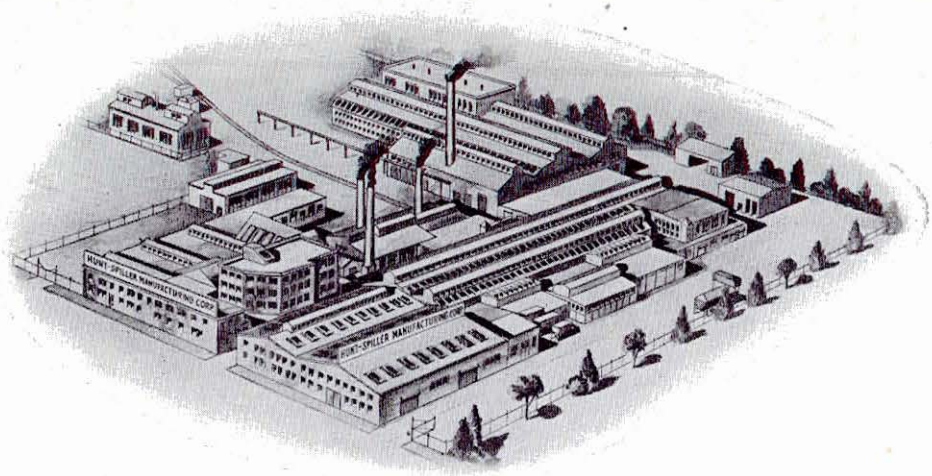

Pardon our Pride . . .
but this is where we live

Hunt-Spiller are exclusive railroad sales representatives for Double Seal Piston Rings made for Diesel and other services. Double Seal rings are cast from Hunt-Spiller *Air Furnace* Gun Iron.

OF COURSE we are proud of the great plant in South Boston where Hunt-Spiller Gun Iron has been made by the air furnace process for 138 years. But that is not the only reason for showing you a picture of it. As a present or potential user of our products, you will want to know about our facilities for serving you. So this is our way of saying, "they're tops!"

Whatever your requirements in almost any kind of iron* and certain types of steel castings, we are ready. Railroads generally know this, for most of them have been our customers for more than a generation.

*** Besides air furnace iron of many types and with various properties, we also manufacture regular cupola or gray iron.**

HUNT SPILLER GUN IRON
HSGI
AIR FURNACE PROCESS

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Cylinder Bushings	Crosshead Shoes	Dunbar Sectional Type Packing
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Pistons or Piston Bull Rings	Shoes and Wedges	for Cylinders and Valves
Valve Bushings	Floating Rod Bushings	(Duplex Springs for Above
Valve Packing Rings	Light Weight Valves	Sectional Packing)
Valve Bull Rings	Cylinder Liners and Pistons	Cylinder Snap Rings
	for Diesel Service	Valve Rings, All Shapes

general foreman. In May, 1922, Mr. Berry became master mechanic of the Frisco, with headquarters at Kansas City, Mo., and on August 10, 1935, he was promoted to assistant superintendent of motive power at Springfield. He was advanced in October, 1945, to superintendent of motive power, which post he held at the time of his new appointment.

ENGINEERING and SIGNALING

D. C. Houston, whose promotion to electrical engineer of the St. Louis-San Francisco, at Springfield, Mo., was reported in *Railway Age* of May 8, was born on February 20, 1887, at Springfield. He attended Drury College and the University of Michigan, and began his railroad career with the Frisco in 1911 as an axle light inspector at Monett, Mo. He was advanced to axle light foreman there in 1913, to traveling axle light inspector at

D. C. Houston

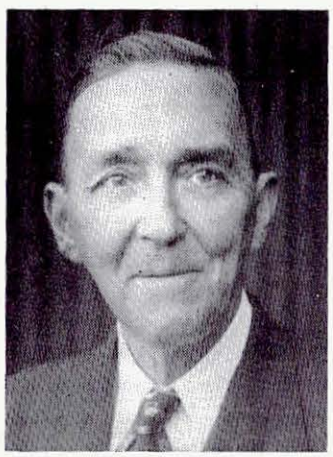
Springfield in 1914 and to assistant light and power engineer in 1918 with headquarters remaining at Springfield. Mr. Houstons' next post was that of general electrical inspector, which he held from 1919 to 1924, at which time he was advanced to assistant electrical engineer. He was serving in the latter position at the time of his recent promotion.

S. W. Miller, whose appointment as superintendent of communications of the New York, Chicago & St. Louis at Cleveland, Ohio, was reported in the *Railway Age* of May 22, was born on July 7, 1904, at Bucyrus, Ohio, where he was graduated from high school in 1922. He then attended Case School of Applied Science, receiving a B.S. degree in electrical engineering in 1926. Mr. Miller entered the service of the Westinghouse Electric Corporation as an apprentice on June 1, 1926, and on January 28, 1927, he went with the Pennsylvania as a signalman, becoming a signal apprentice seven months later. After completing his three year apprenticeship he worked in various capacities on the P.R.R. as draftsman, signalman, acting telegraph and signal inspector and maintenance of way inspector in charge of Sperry testing equipment. Starting August 1, 1935, he specialized in communications work, supplementing his education with communications courses at the R.C.A. In-

S. W. Miller

stitute, and the Illinois Institute of Technology, and serving in various capacities as assistant telegraph and signal foreman, telegraph and signal foreman, assistant telegraph and telephone inspector, and telephone and telegraph inspector, holding the latter position when he left the Pennsylvania to go with the Nickel Plate as superintendent of communications.

Harold Robert Bausch, whose appointment as principal assistant engineer of the Jersey Central lines at Jersey City, N. J., was reported in *Railway Age* of May 8, was born on April 11, 1892, at Farmingdale, N. Y. Mr. Bausch en-



Harold Robert Bausch

tered railroad service in June, 1910, with the Long Island, serving as transitman until 1914. He went with the Jersey Central lines on May 28, 1915, as transitman in the engineering department, becoming principal draftsman in that department on August 1, 1924. On March 16, 1930, Mr. Bausch was appointed assistant engineer in the maintenance of way department, transferring to the engineering department on June 16, 1934, where he remained until his recent appointment as principal assistant engineer.

PURCHASES and STORES

George R. Merryman, whose appointment as general storekeeper of the Central of New Jersey at Elizabethport, N. J., was reported in the *Railway Age* of April 3, was born on December 28, 1891, near Winnipeg, Man., Canada. After attending St. Johns Military Academy, Annapolis, Md., Mr. Merryman studied engineering and forestry at McGill University, Montreal, Que. He also attended New York Institute of Applied Arts, studying in oil painting. Mr. Merryman entered railroad service in 1913 with the Baltimore & Ohio's Staten Island, N. Y., lines as special apprentice, subsequently transferring to Baltimore, Md. He enlisted in the Canadian "Princess Patricia" regiment in July, 1915, as first lieutenant and was discharged as captain. Returning to the B. & O. in June, 1919, he served as material supervisor of the West Virginia district until September, 1923, when he became mechanical inspector for the Prudential Oil Company, Fairfield, Md. Mr. Merryman re-entered the service of the B. & O. in 1925 as material supervisor, Cumberland rolling mill. On September 1, 1927, he went with the Central of New Jersey as section storekeeper at Elizabethport, becoming chief clerk on July 1, 1928; general foreman on March 12, 1928; lumber foreman and inspector on April 1 1937; general foreman on April 16, 1942, and division storekeeper on November 19, 1943. He held the latter position at the time of his recent promotion to general storekeeper.

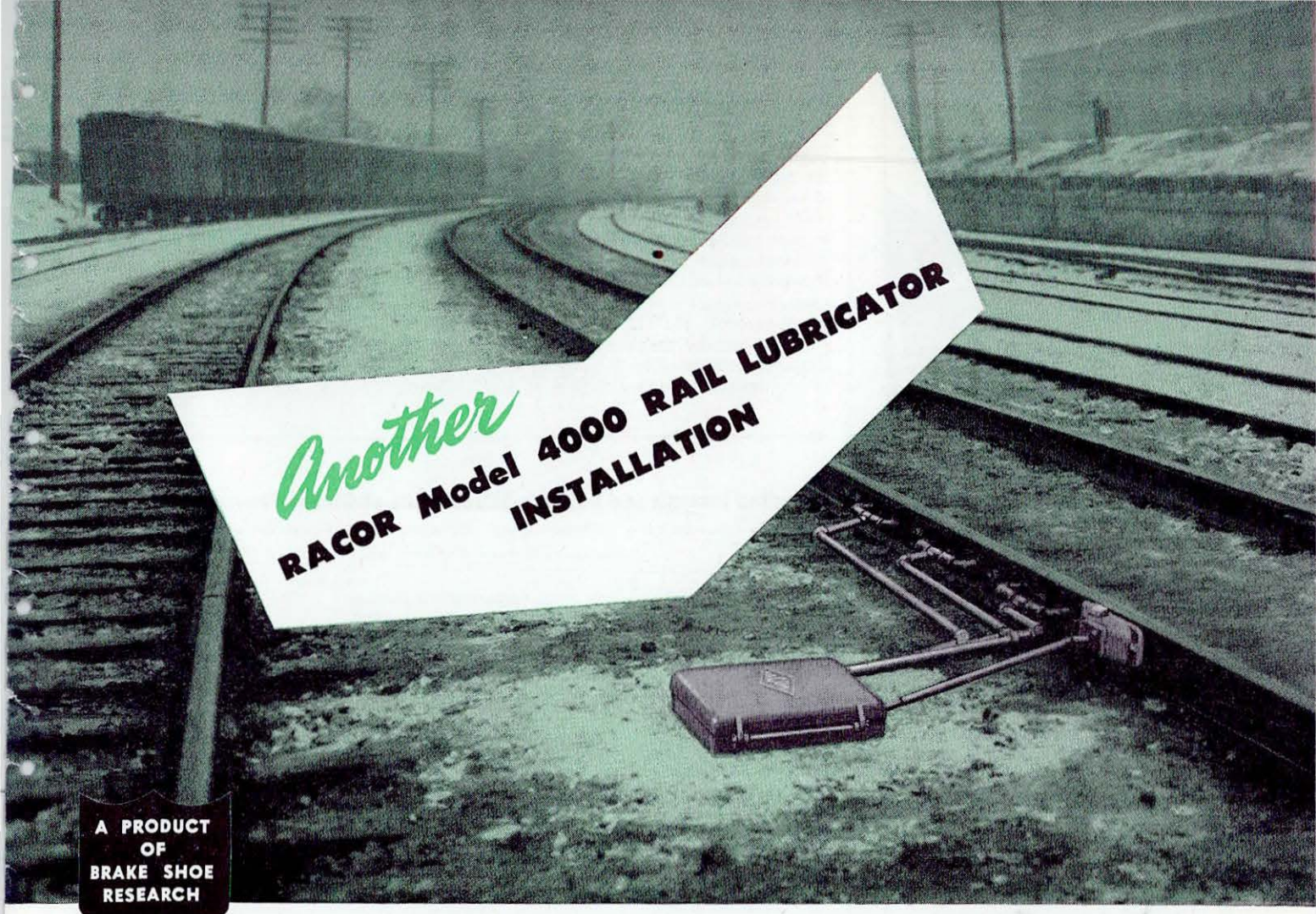
Gordon P. Bier, office manager of the Illinois Central's purchases and stores department, at Chicago, has been appointed assistant to the director of purchases and stores at that point. He succeeds **George E. Lyman,** whose death was reported in *Railway Age* of May 8.

OBITUARY

Thomas B. Gallaher, general passenger traffic manager of the Atchison, Topeka & Santa Fe, at Chicago, died suddenly at his office in that city on May 21, while conducting a conference.

Arthur Montzheimer, who retired in 1939 as chief engineer of the Elgin, Joliet & Eastern, at Joliet, Ill., died on May 20 at Clearwater, Fla.

Ira W. Morris, retired assistant general freight agent of the Chesapeake & Ohio at Columbus, Ohio, died in that city on May 22.



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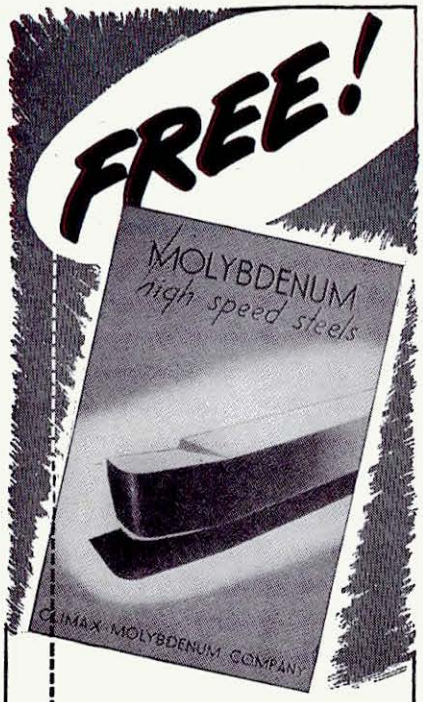

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Railroads Press Fight

(Continued from page 52)

S.2055, which would provide eligibility for an annuity on the basis of 30 years of service regardless of age or physical condition, and a minimum annuity of at least one-half of the averaged monthly compensation for the last five years of service for any employee who had at least 30 years of service; S.2228, which would amend the Retirement Act's minimum-annuity provisions to give an employee retiring after 20 years of service a minimum annuity of $100 or his monthly compensation, whichever is smaller, and to apply like increases to minimum annuities already in effect; S.2300, which proposes a 30 per cent increase in all retirement and survivor benefits under the Retirement Act payable on or after July 1, and that the increase apply to all monthly benefits already in effect on that date; and S.2423, which would liberalize the basis for computing retirement annuities. Opposition to the latter four measures was registered at the hearings by representatives of the Retirement Board, R.L.E.A., and A.A.R.

Selected Income and Balance-Sheet Items of Class I Steam Railways

Compiled from 127 reports (Form 1BS) representing 131 steam railways

(Switching and Terminal Companies Not Included)

	United States			
	For month of February		For the two months of	
	1948	1947	1948	1947
1. Net railway operating income	$39,425,294	$43,820,930	$81,071,747	$102,319,791
2. Other income	19,739,001	16,036,514	38,792,133	32,373,496
3. Total income	59,164,295	59,857,444	119,863,880	134,693,287
4. Miscellaneous deductions from income	3,441,779	3,044,522	7,286,990	6,319,057
5. Income available for fixed charges	55,722,516	56,812,922	112,576,890	128,374,230
6. Fixed charges:				
6-01. Rent for leased roads and equipment	10,243,027	10,487,013	20,005,106	20,859,193
6-02. Interest deductions[1]	24,234,726	26,129,612	48,578,474	52,481,116
6-03. Other deductions	136,387	136,456	279,621	274,048
6-04. Total fixed charges	34,614,140	36,753,081	68,863,201	73,614,357
7. Income after fixed charges	21,108,376	20,059,841	43,713,689	54,759,873
8. Other deductions	3,310,744	2,833,365	6,709,355	5,687,221
9. Net income	17,797,632	17,226,476	37,004,334	49,072,652
10. Depreciation (Way and structures and Equipment)	30,178,996	28,822,533	60,291,088	57,708,771
11. Amortization of defense projects	1,605,277	1,354,383	3,053,875	2,730,390
12. Federal income taxes	22,323,963	20,787,688	46,065,627	44,732,220
13. Dividend appropriations:				
13-01. On common stock	26,081,447	19,401,271	29,240,056	22,303,898
13-02. On preferred stock	4,268,196	2,764,928	6,593,944	5,347,197
Ratio of income to fixed charges (Item 5÷6-04)	1.61	1.55	1.63	1.74

	United States	
	Balance at end of February	
Selected Expenditure and Asset Items	1948	1947
17. Expenditures (gross) for additions and betterments—Road	$37,600,387	$31,379,999
18. Expenditures (gross) for additions and betterments—Equipment	128,858,875	65,267,759
19. Investments in stocks, bonds, etc., other than those of affiliated companies (Total, Account 707)	564,947,205	586,151,104
20. Other unadjusted debits	166,320,640	169,793,864
21. Cash	936,724,106	948,562,349
22. Temporary cash investments	981,926,950	1,034,582,591
23. Special deposits	127,287,363	145,455,443
24. Loans and bills receivable	12,624,511	220,691
25. Traffic and car-service balances—Dr	51,524,309	45,418,225
26. Net balance receivable from agents and conductors	141,847,016	129,684,285
27. Miscellaneous account receivable	335,082,393	288,573,051
28. Materials and supplies	794,742,505	692,159,010
29. Interest and dividends receivable	16,114,782	16,957,022
30. Accrued accounts receivable	173,281,512	170,659,392
31. Other current assets	35,244,226	57,848,544
32. Total current assets (items 21 to 31)	3,606,399,673	3,530,119,603
40. Funded debt maturing within 6 months[2]	$134,352,913	$188,854,678
41. Loans and bills payable[3]	3,915,000	9,745,600
42. Traffic and car-service balances—Dr	108,899,889	104,279,169
43. Audited accounts and wages payable	627,972,491	511,249,355
44. Miscellaneous accounts payable	208,715,465	176,860,275
45. Interest matured unpaid	46,562,069	52,206,168
46. Dividends matured unpaid	8,405,203	4,471,534
47. Unmatured interest accrued	85,342,989	77,242,743
48. Unmatured dividends declared	40,643,864	39,898,252
49. Accrued accounts payable	185,106,117	157,901,876
50. Taxes accrued	650,778,616	419,212,932
51. Other current liabilities	113,204,363	99,293,464
52. Total current liabilities (items 41 to 51)	2,079,546,066	1,652,361,368
53. Analysis of taxes accrued:		
53-01. U. S. Government taxes	530,929,608	308,396,268
53-02. Other than U. S. Government taxes	119,849,008	110,816,664
54. Other unadjusted credits	337,101,713	353,706,623

[1] Represents accruals, including the amount in default.
[2] Includes payments of principal of long-term debt (other than long-term debt in default) which becomes due within six months after close of month of report.
[3] Includes obligations which mature not more than one year after date of issue.

Compiled by the Bureau of Transport Economics and Statistics, Interstate Commerce Commission. Subject to revision.

Would Spend $2,000,000 to Keep Barge Lines a "Going Concern"

Appropriation of $2,000,000 for purchase by the Department of Commerce of additional stock of the government-owned Inland Waterways Corporation, operator of the Federal Barge Lines, is proposed in the Government Corporations Appropriation Bill for the fiscal year ending June 30, 1949, which was passed recently by the House. The amount is $1,000,000 less than the $3,000,000 proposed for that purpose in President Truman's budget, as noted in the *Railway Age* of January 17, page 53.

The report on the bill, H.R.6481, which was made by the House committee on appropriations said that the $2,000,000 "should enable the corporation to obtain enough new capital equipment to demonstrate efficient operation and to attract private capital to this enterprise, and also to provide working capital adequate under careful management to maintain the corporation as a going concern."

The committee's report went on to say that the appropriation was being recommended in the hope that Congress would enact pending legislation to make less restrictive the conditions under which I.W.C. facilities may be sold to private interests (see *Railway Age* of May 15, page 208). Making funds available for "new capital equipment," the committee also hoped, would promote the development of operations "to a point that private operators will be encouraged to render this important service."

That financial results of I.W.C. operations are continuing to fall short of the estimates which it submits for inclusion in the President's budget was indicated by the record of hearings on the bill before an appropriations subcommittee. William C. Foster, undersecretary of commerce, testified that the operating loss for the first seven months of the current fiscal year, i.e., as of January 31, was $834,000. The estimate included in the President's budget had put the anticipated loss for the whole year at $825,900. A year earlier, in the President's previous budget, the I.W.C. submission indicated that it expected to realize a net income of $513,712 during the current fiscal year.

Except as to special items, like the additional $2,000,000 proposed for I.W.C., the bill deals with the fiscal 1949 budgets of the various government corporations as set up in the President's budget. In that connection it fixes limits on amounts which may be spent by such corporations for administrative expenses. Subject to such limitations, the submitted budgets are approved, the corporations retaining control of their revenues and expenses.

Limitations embodied in the bill stipulate that I.W.C. shall not spend in fiscal 1949 more than $498,800 for administrative expenses. This was the amount proposed in the President's budget. Meanwhile, the budget also showed that I.W.C.'s total operating expenses for fiscal 1949 are expected to be $10,179,900, and that it expects to realize for that year a net income of $1,145,300.

Lets Louisville & Nashville Drop "Anomalous" Commutation Fares

Because they are "an anomaly in the fare structure" and "clearly on bases less than reasonable for the service performed," Division 3 of the Interstate Commerce Commission has authorized the Louisville & Nashville to cancel the 3-, 4-, 6-, and 12-month commutation fares which it has maintained for many years between New Orleans, La., and Mississippi Gulf Coast points. The cancelation tariffs have been under suspension pending the investigation (I. & S. Docket No. 5516) out of which the present report has come; and the division now requires their withdrawal without prejudice to the filing of new tariffs which will combine the cancelation of long-term commutation fares with an adjustment of the remaining monthly commutation rates.

The latter now provide for a 62-trip monthly ticket, and the adjustment required by the division will make available also a 54-trip monthly ticket, not good on Sundays, at fares 10 per cent under the corresponding 62-trip fares; and a 46-trip monthly ticket, not good on Sundays or Saturdays, at fares 15 per cent under the corresponding 62-trip fares. All of these monthly tickets are to be on sale every day of the month, and are to be "good from the date of sale to but not including the corresponding date of the succeeding month."

The longer-term tickets which are now to be canceled, were inherited by the L. & N. in 1881, when it acquired the line of the New Orleans, Mobile & Texas, the report said. "No such fares," it added, "are in use on any other part of respondent's railroad, and its investigation disclosed that no commutation tickets of the character of those sought to be canceled are for sale by other railroad in the country. No change has been made in the level of these fares for 27 years."

Comparative figures set out in the report showed the average commutation fares per permissive ride for various distances up to 83 miles, the averages for the 83-mile trip being: 3- and 4-month tickets, 38 cents; 6-month tickets, 29 cents; 12-month ticket, 21 cents. The comparable figure is 52 cents for the 62-trip monthly ticket. In approving a scale based on latter, the division found that such a basis would "compare favorably" with commutation fares approved recently by the commission for railroads serving Chicago, New York and other eastern cities.

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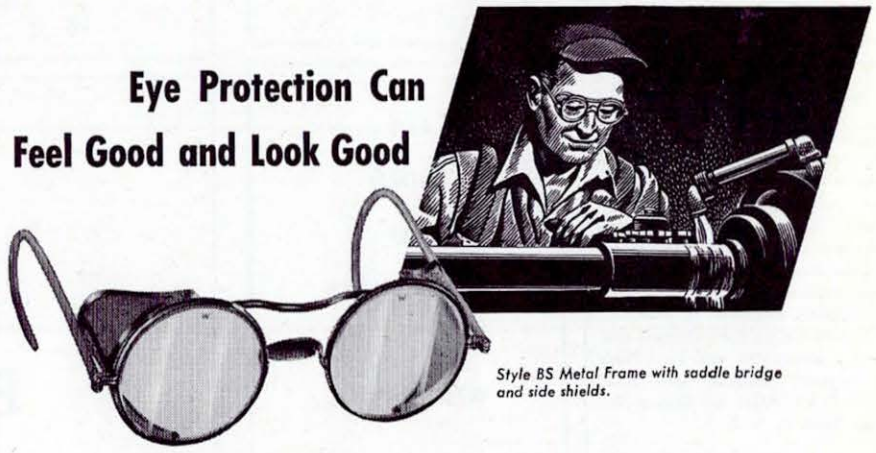

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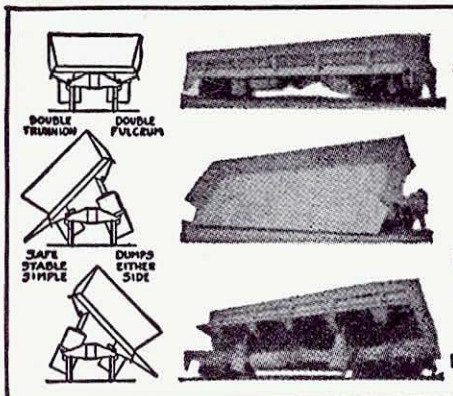

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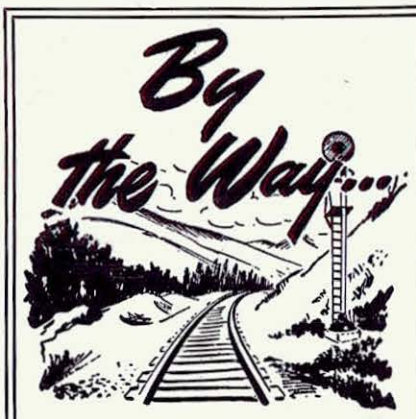

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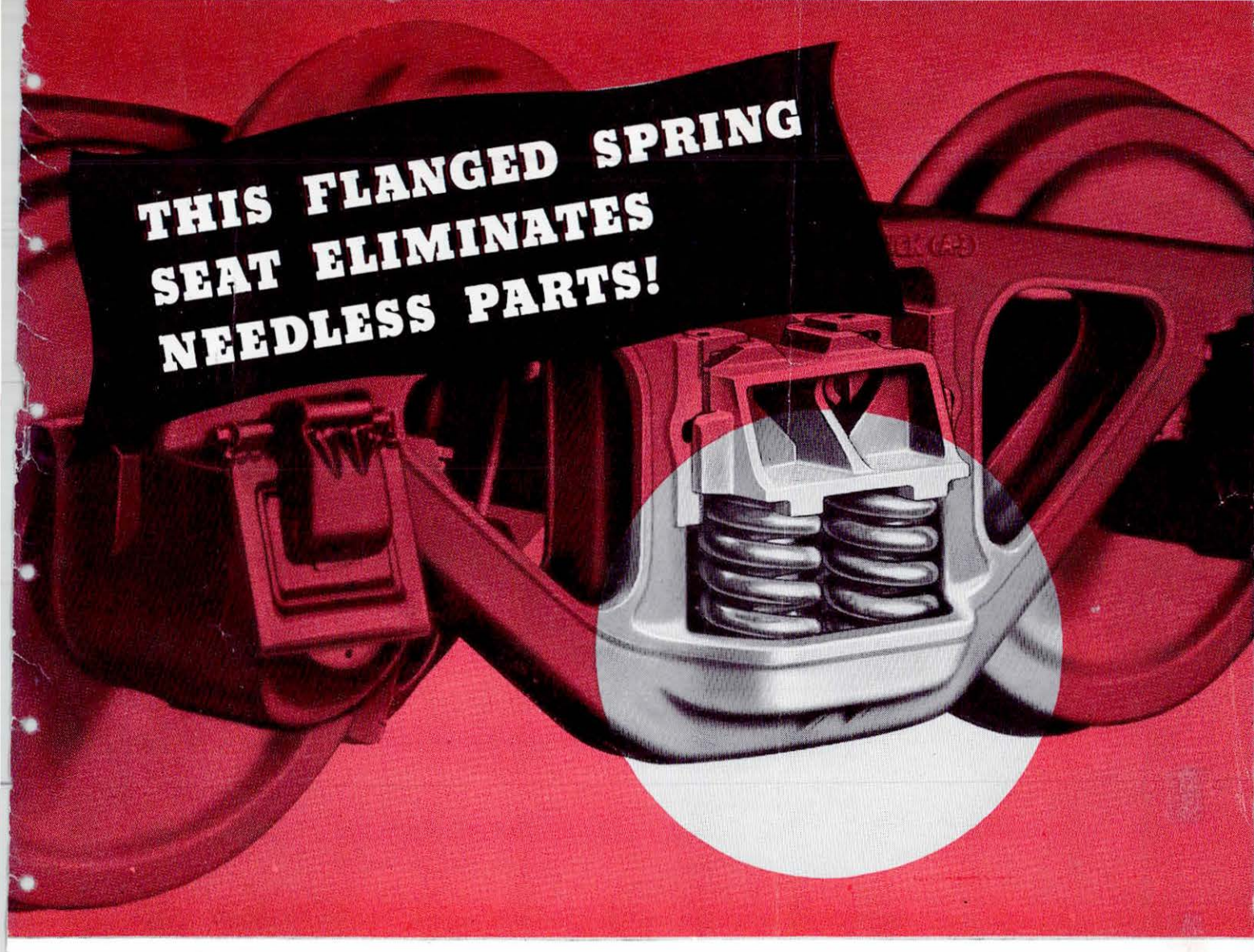


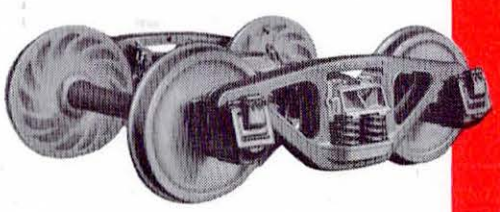
In design, *as in performance,* the Ride-Control Truck offers striking proof of progressive engineering. The soft, smooth, easy ride is achieved with *utmost* construction simplicity.

The flanged spring seat, *an A.S.F. development,* is an excellent example. It eliminates spring plates —provides ample room for long spring travel, *without* encroaching on rail clearance beneath the frame, or on body bolster clearances above the frame.

A·S·F *Ride-Control* TRUCK

NO SPRING PLATES • NO SPRING PLANKS

LONG SPRING TRAVEL • CONSTANT FRICTION CONTROL



AMERICAN STEEL FOUNDRIES

MINT-MARK OF FINE CAST STEEL

Packaged for Protection Plus –

TO better serve our railroad customers, the "Unitized Packaging" program developed by Electro-Motive for packing, shipping and storing General Motors Diesel parts assures:

1. Quick and easy identification of all parts
2. Complete protection against atmosphere or handling
3. Protection against strain or breakage
4. Simplicity of handling
5. Ease and neatness of storage

Parts requiring protection against moisture and handling are carefully coated with oil and wrapped with preservative material — wax paper, wax cloth, cellophane or aluminum foil, depending upon the part involved.

All parts are packaged by assemblies and are clearly labeled with part number, description and quantity. Individual cartons are then packed in quantities which experience has shown best serve railroad needs.

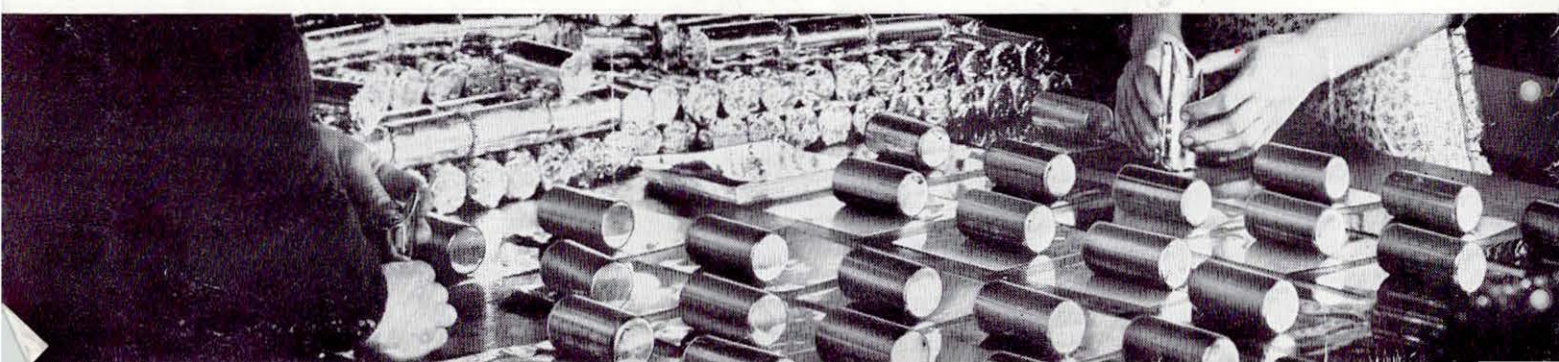
Cartons and boxes of special design guard against strain or breakage. They are easily stored and quickly identified — no need to open package until the part is required.

Engineered packaging of replacement parts is just one of the many steps Electro-Motive takes to help you keep your General Motors Diesels running at peak performance and with lowest operating and maintenance costs.

It's another good reason why it always pays to specify genuine General Motors parts for your Diesel locomotives.

GENERAL MOTORS LOCOMOTIVES

ELECTRO-MOTIVE DIVISION

GENERAL MOTORS LA GRANGE, ILL.

Home of the Diesel Locomotive